

269188

# **Sentinel Wells Quarterly Monitoring Report October 2004**

**1190505040 -- Madison County -- ILR000128249**

**The Hartford Area Hydrocarbon Plume Site  
Hartford, Illinois**

*Prepared for:*

**The Hartford Working Group**  
Hartford, Illinois

Clayton Project Number 15-03095.15-003  
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## 1.0 INTRODUCTION

Clayton Group Services, Inc., on behalf of the Hartford Working Group (HWG), has prepared this monitoring report for the five sentinel wells located within the Village of Hartford, Illinois (Hartford) (Figure 1). The HWG comprises the Atlantic Richfield Company (Atlantic Richfield), The Premcor Refining Group Inc. (Premcor), and Shell Oil Products US (Shell). The work was done in accordance with the monitoring program developed under Paragraph 47 of the Administrative Order on Consent (AOC) with the U.S. Environmental Protection Agency (USEPA) in the Matter of The Hartford Area Hydrocarbon Plume Site (Docket No. R7003-5-04-001) (USEPA undated). Paragraph 47 of the AOC requires that the five sentinel wells be sampled quarterly for one year. After one year, a groundwater monitoring program will be established consistent with the results of the dissolved phase groundwater investigation. Paragraph 47 of the AOC also requires the work to be completed in accordance with the Sentinel Wells Work Plan, dated October 16, 2003, and approved by the USEPA on November 21, 2003 (Clayton 2003).

This report presents the results of the third quarter groundwater monitoring activities conducted in Hartford during the week of October 18, 2004. Clayton also completed a comprehensive well gauging event in Hartford during the week of October 18, 2004. The well gauging, with the cooperation of Shell and Premcor, was extended to include the Shell Rand Avenue site, the Shell Tannery Property, and the Premcor property.

The five wells, HMW-25 through HMW-29, were installed to serve as sentinels for monitoring of the possible encroachment upon the Hartford Well Head Protection Area (WHPA) (McGuire et al. 2001) of the identified Light Non-Aqueous Phase Liquid (LNAPL) hydrocarbon separate phase and dissolved phase plumes located within the northern portion of Hartford. The WHPA is the surface area near the two active Hartford municipal water supply wells that may provide recharge to the aquifer over a 5-year

period. The sentinel wells were placed at a distance that represents an approximate 2-year travel time to the WHPA boundary (Clayton 2003). Figure 2 shows the location of the sentinel wells, the Hartford municipal water supply wells, and the WHPA.

## 2.0 WELL GAUGING

Clayton completed a comprehensive well gauging event in Hartford during the week of October 18, 2004. This event was conducted at all of the accessible monitoring wells in Hartford that could be located by Clayton and included the sentinel wells (HMW-25 through HMW-29). The sentinel wells were also inspected at this time to evaluate the continued suitability of the well for both gauging and groundwater monitoring. The well gauging, with the cooperation of Shell and Premcor, was extended to include the remaining accessible groundwater monitoring wells at the Shell Rand Avenue site and the Shell Tannery Property (Shell SP- and P-series wells) and those installed on the Premcor property (Premcor RB-series wells). The Shell Rand Avenue and Tannery Property sites are located immediately to the northeast and east of the north half of Hartford, while the Premcor facility is immediately east of the central portion of Hartford.

The hydrogeology in the vicinity of north Hartford consists of four hydrostratigraphic units identified in descending order as the North Olive Stratum, the Rand Stratum, and the EPA Stratum, all of which overlie the Main Sand (Clayton 2004a). The sentinel wells are located in the Main Sand as are the Hartford municipal water supply wells. The inclusion of the Shell wells provided additional gauging and groundwater flow data beyond the Hartford boundaries for the Rand Stratum, the EPA Stratum, and the Main Sand. Likewise, the inclusion of the Premcor wells provided additional gauging and groundwater flow data for the Main Sand beyond the Hartford boundaries.

The well gauging event was conducted to identify the presence of separate phase LNAPL hydrocarbon, measure apparent LNAPL product thickness in wells (if any), and determine groundwater flow directions. The apparent product thickness (where present)

measurements were also used to calculate the piezometric surface elevations.

Groundwater and LNAPL gauging data in Hartford from October 2004 and prior data obtained quarterly in 2004 are summarized in Table 1. Tables 2 and 3 provide the results of the quarterly monitoring well gauging for the Shell wells and the wells on the Premcor facility, respectively.

The results of the monitoring well inspections are included in Appendix A. The sentinel wells were determined to be in satisfactory condition for continued use in the monitoring program.

Groundwater flow maps were constructed for the October 2004 gauging event for three of the four identified hydrostratigraphic units (Main Sand, EPA Stratum, and Rand Stratum). An elevation map was created for the North Olive Stratum that simply presents the groundwater elevation data, as the majority of the wells were dry. Clayton (2004c) presented an evaluation of wells appropriate for gauging each of the strata. The flow and elevation maps are presented as Figures 3 through 6, respectively.

Clayton also completed an apparent product thickness evaluation during this gauging event. This information has been presented simply as a measurement of apparent LNAPL thickness (if any) at the wells (Tables 1 through 3). In general, the LNAPL plume in the Main Sand (Figure 7) continues to show the extent of the plume is defined. Small, apparently localized, areas of separate phase LNAPL hydrocarbon were found in both the EPA (Figure 8) and Rand Strata (Figure 9). No separate phase LNAPL hydrocarbon was observed in the North Olive Stratum.

The October 2004 groundwater flow map of the Main Sand (Figure 3) indicates the flow direction is generally northwesterly. This overall northerly groundwater flow direction is consistent with historical interpretations. Throughout 2004 the flow direction was noted to have a westerly component, with the exception of July 2004, which revealed an

easterly component. The observed easterly component was apparent when the Mississippi River stage was at approximately 407 feet mean sea level (MSL) with the westerly flow component present when the stage ranged from approximately 399 to 402-feet MSL. The Mississippi River stage data is measured at the Mel Price Tailwater (TW) Alton, Illinois gauging station (US Army Corps of Engineers 2004).

The October 2004 groundwater flow map (Figure 4) of the EPA Stratum indicates a northwesterly flow. In July and April 2004 a groundwater divide that trends along a general east/west axis was observed. The identified axis was located slightly east of the intersection of East Rand Avenue and North Olive Street. The flow to the north of this axis was generally northerly, while the flow to the south of the axis was southwesterly. In January 2004 the groundwater flow was identified as southwesterly towards Hartford with no hinge observed. In part, the groundwater flow direction variability is believed to be due to gauging limited and, occasionally, different well sets during the course of 2004. In the future, well gauging is to be conducted at all of the identified wells in the EPA Stratum including those recently completed in 2004. However, further evaluation over time is needed, as this is not believed to account for all of the observed variability.

The October 2004 groundwater flow map of the Rand Stratum (Figure 5) revealed a northwest/southeast trending mound near the intersection of North Olive Street and East Rand Avenue. Groundwater to the south of the mound was identified as flowing towards Hartford while groundwater north of the mound flowed in a northeasterly direction away from Hartford. The groundwater flow in January, April, and July 2004 was identified as generally northeasterly away from Hartford with no mound observed. These three earlier maps also were limited to Shell wells north of Rand Avenue, as no Rand Stratum wells had been installed within Hartford with three exceptions (HMW-1, 4, and 7) until the summer of 2004. In the future, well gauging is to be conducted at all of the identified wells in the Rand Stratum. As with the EPA Stratum, continued evaluation over time is needed to better understand groundwater flow in the Rand Stratum.

No wells had been installed in the North Olive Stratum until the summer of 2004. The October 2004 well gauging revealed only 11 of the 34 monitoring points situated in this unit actually contained groundwater (Figure 6). The points that contained water were generally scattered throughout Hartford. The review did not indicate the continuous presence of groundwater throughout the North Olive Stratum. The measured groundwater in these wells is considered to represent localized areas of perched water that are potentially seasonal or more ephemeral. Therefore, only an elevation map was created for the North Olive Stratum that simply presents the groundwater elevation data.

### 3.0 GROUNDWATER SAMPLE COLLECTION

The sentinel well sampling was conducted on October 19 and 20, 2004. Groundwater samples were collected in laboratory-supplied, pre-preserved (if appropriate) containers, using the low-flow sampling technique (Clayton 2004b) from the five sentinel monitoring wells (HMW-25 through HMW-29). Dedicated bladders and polypropylene tubing were used at each well during purging and sampling to prevent cross-contamination. After collection, samples were immediately labeled, placed in a cooler containing ice, and were delivered under chain-of-custody procedures to Teklab, Inc. (Teklab) of Collinsville, Illinois for laboratory analysis.

The low-flow sampling technique resulted in the removal of approximately one gallon of water at each sentinel well prior to sample collection. The groundwater removed from each well was temporarily stored in a double-walled tank located in a secure area within Hartford before removal by a waste disposal contractor.

Water quality parameters of temperature, pH, oxidation reduction potential, dissolved oxygen, turbidity, and specific conductivity were electronically measured and recorded using a calibrated Mini-Troll with an associated Pocket PC (in addition to the field

logbook) during purging and prior to sample collection. The downloaded data logger indicator parameter records for the October 2004 event are included in Appendix B.

The samples were analyzed for the "Skinner List" as identified in the AOC. Specifically, the samples were analyzed for the following parameters: volatile organic compounds (VOCs) (including methyl tertiary butyl ether [MTBE] and ethylene dibromide [EDB]); 1,4-dioxane; semi-volatile organic compounds (SVOCs); metals; and cyanide. The samples were also analyzed for General Chemistry parameters such as Alkalinity, Chemical Oxygen Demand, Chloride, Hardness, pH, Sulfate, Total Dissolved Solids, Sulfide, and Total Suspended Solids.

The Skinner List of parameters, the General Chemistry parameters, the practical quantitation limits, and the analytical methods are presented in Table 4. The containers with applicable preservation requirements (if appropriate) for each parameter are presented in Table 5.

#### **4.0 GROUNDWATER ANALYTICAL RESULTS**

Analytical results from October 2004 indicate a groundwater sample from only one of the five sentinel wells contained parameters that are above the 35 IAC Part 742, TACO. The analytical results indicate sentinel well HMW-29 contained lead at a concentration of 0.0134 milligrams per liter (mg/L), which is above the TACO Tier 1 Class I groundwater remediation objective (GRO) for lead of 0.0075 mg/L. The analytical results also indicate tetrachloroethene was detected below the practical quantitation limit at sentinel well HMW-25. It was estimated at a concentration of 0.0014 mg/L, which is below the TACO Tier 1 Class I GRO for tetrachloroethene of 0.0050 mg/L. In this sampling event, elevated reporting limits for sulfide were present regarding two of the samples, HMW-28 and HMW-29, due to matrix interference. Three samples (HMW-25, HMW-26, and DUP 001 [HMW-26]) exceeded the hold time requirements of 24 hours for pH. This is

not believed to impact the conclusions of this report as real-time pH measurements were taken in the field as part of the stabilization of water quality parameters. An evaluation of the Quality Assurance/Quality Control (QA/QC) samples from this sampling event did not reveal any concerns.

Based on the October 2004 groundwater analytical results, the sentinel wells have not been impacted by the identified LNAPL or dissolved phase plumes underlying the northern portion of Hartford. This evaluation is based on the absence of concentrations of petroleum hydrocarbon constituents above applicable TACO Class I GROs with the exception of one parameter (lead). The identification of occasional lead exceedances in the sentinel wells is not considered an indication of impact from the LNAPL plume due to the sporadic nature and location of the occurrences in light of the long-term existence of the LNAPL plume. Furthermore, lead is often a naturally occurring constituent in groundwater. The evaluation is also based upon the groundwater flow mapping of the Main Sand that shows flow in the northern portion of Hartford is to the north, away from the Hartford WHPA and the Hartford municipal water supply wells.

Tables 6, 7, 8, and 9 present the laboratory analytical results for VOCs, SVOCs, Metals, and General Chemistry Parameters, respectively, for the 2004 and the December 2003 sentinel well sampling events. The October 2004 laboratory analytical report from Teklab is included in Appendix C.

## **5.0 FUTURE ACTIVITIES**

As required by Paragraph 47 of the AOC, the fourth quarter sampling event, to be scheduled during January or February 2005, will be conducted in accordance with the Sentinel Wells Work Plan, dated October 16, 2003, and approved by the USEPA on November 21, 2003. A comprehensive well gauging event will also be conducted for the Hartford, Shell, and Premcor groundwater monitoring wells.

## 6.0 REFERENCES

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Illinois Pollution Control Board, 1997a. *Tiered Approach to Corrective Action Objectives: 35 IAC Part 742*. Adopted rule, Final Order June 5, 1997. Last amended February 2002.

McGuire, M., J. Keller, K. Miller, and S. Esling, 2001. *Delineation of a Well Head Protection Area Hartford, Illinois*

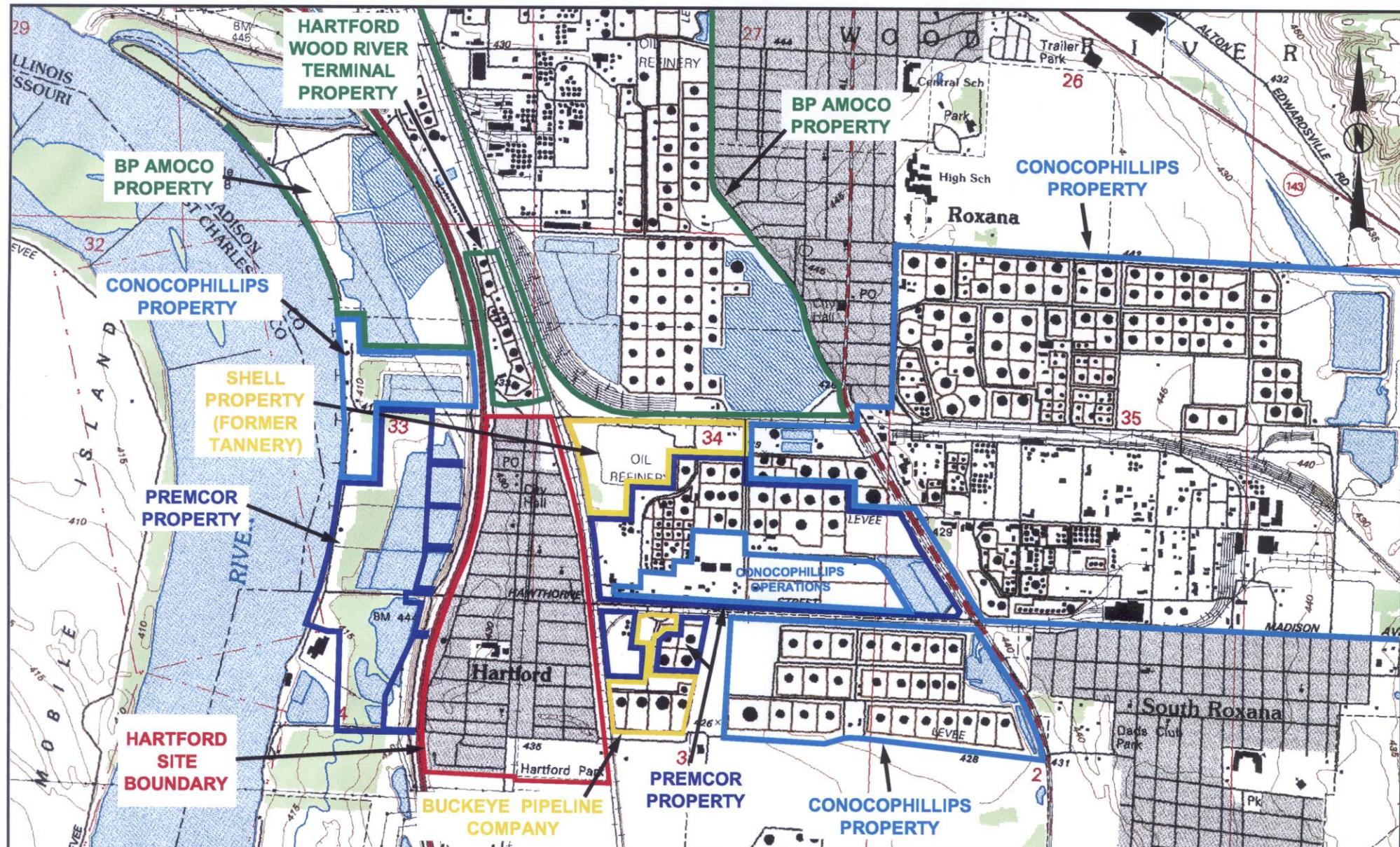
US Army Corps of Engineers, 2004. Mississippi River at Melvin Price Lock and Dam (Alton, IL).

(<http://www2.mvr.usace.army.mil/WaterControl/stationinfo2.cfm?sid=MPRISE&fid=ALNI2&dt=S>)

United States Environmental Protection Agency, Region 5, Chicago, Illinois. *In the Matter of the Hartford Area Hydrocarbon Plume Site*. (Docket No. R7003-5-04-001).



## FIGURES



\*\* NOT TO SCALE \*\*

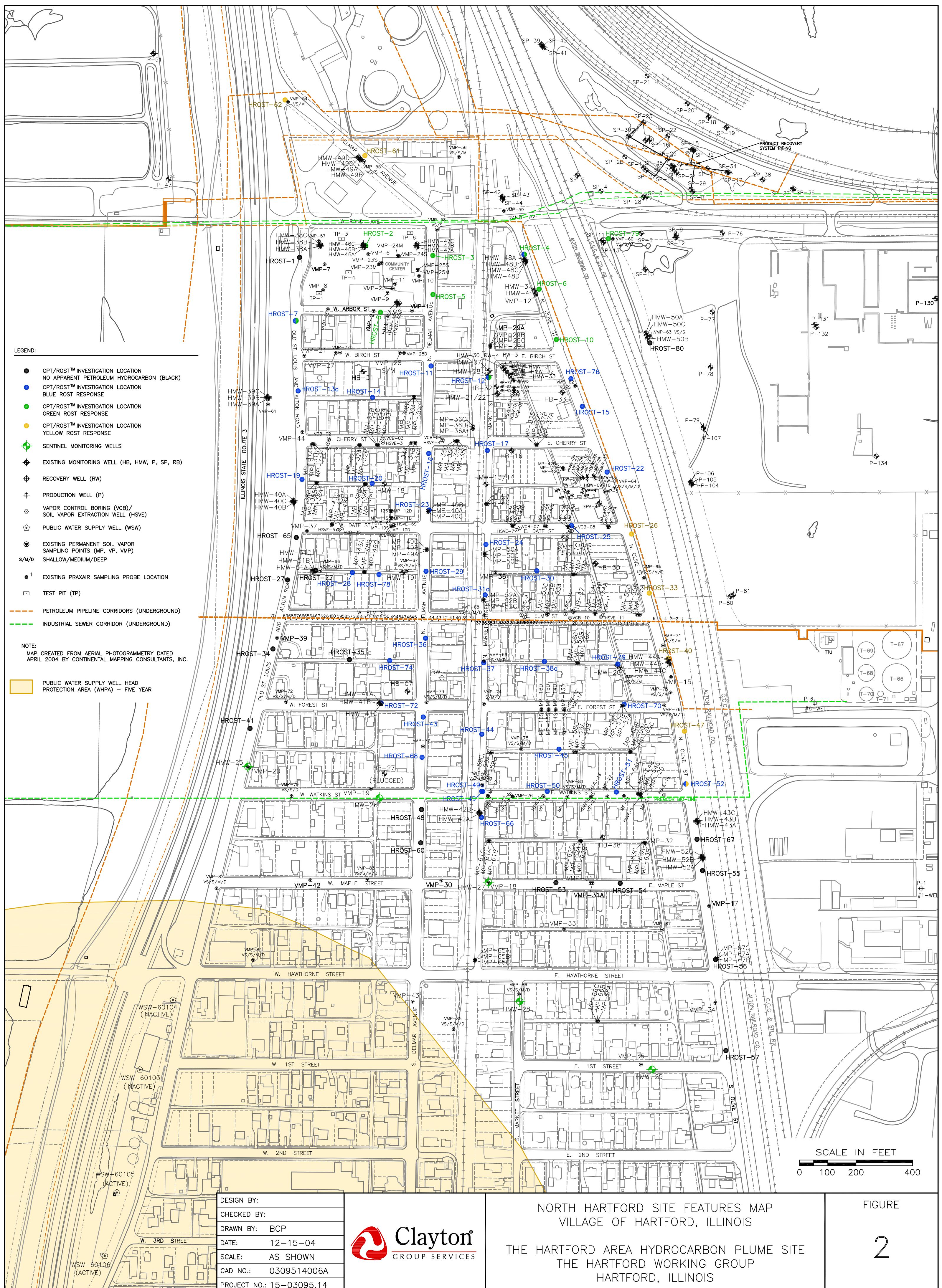
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USGS 7.5 MINUTE SERIES TOPOGRAPHIC MAP  
(WOOD RIVER, ILL-MO. - rev.1994)

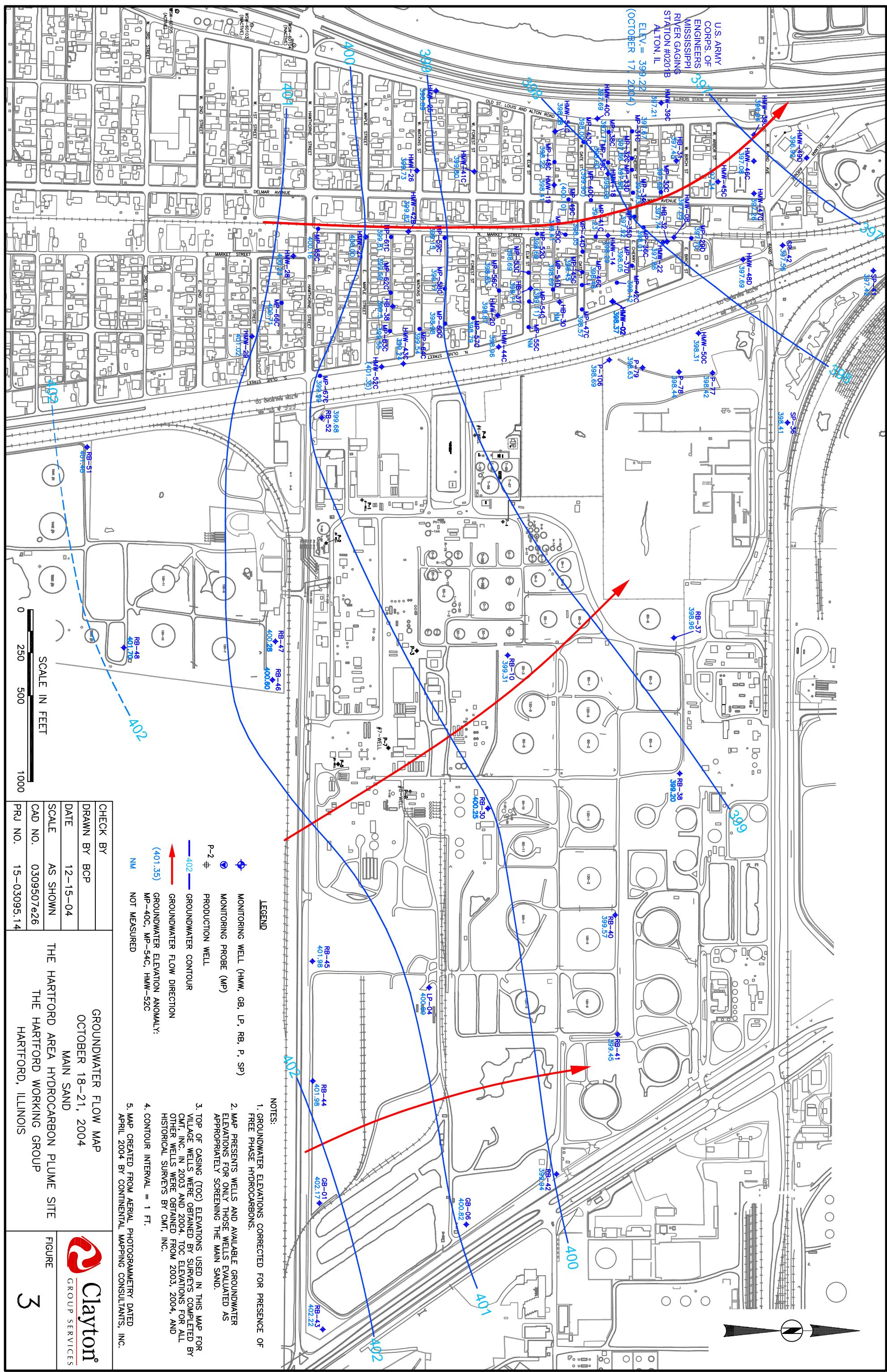
CHK BY	
DWN BY	BCP
DATE	12-15-04
SCALE	AS SHOWN
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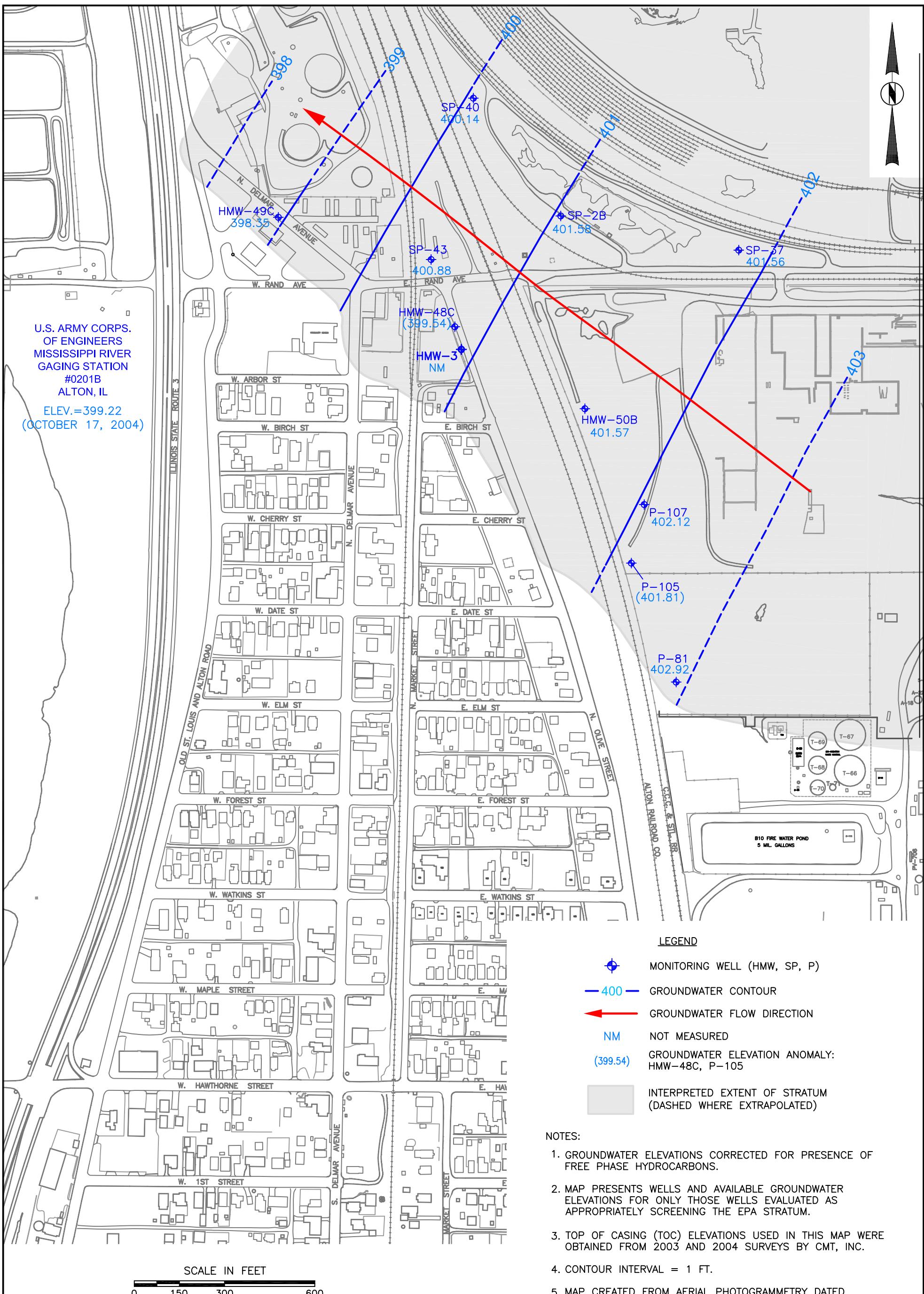
VILLAGE OF HARTFORD, IL AND  
SURROUNDING AREA MAP  
THE HARTFORD AREA HYDROCARBON PLUME SITE  
THE HARTFORD WORKING GROUP  
HARTFORD, ILLINOIS

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FIGURE  
1







CHECK BY KDC

DRAWN BY BCP

DATE 12-15-04

SCALE AS SHOWN

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PRJ NO. 15-03095

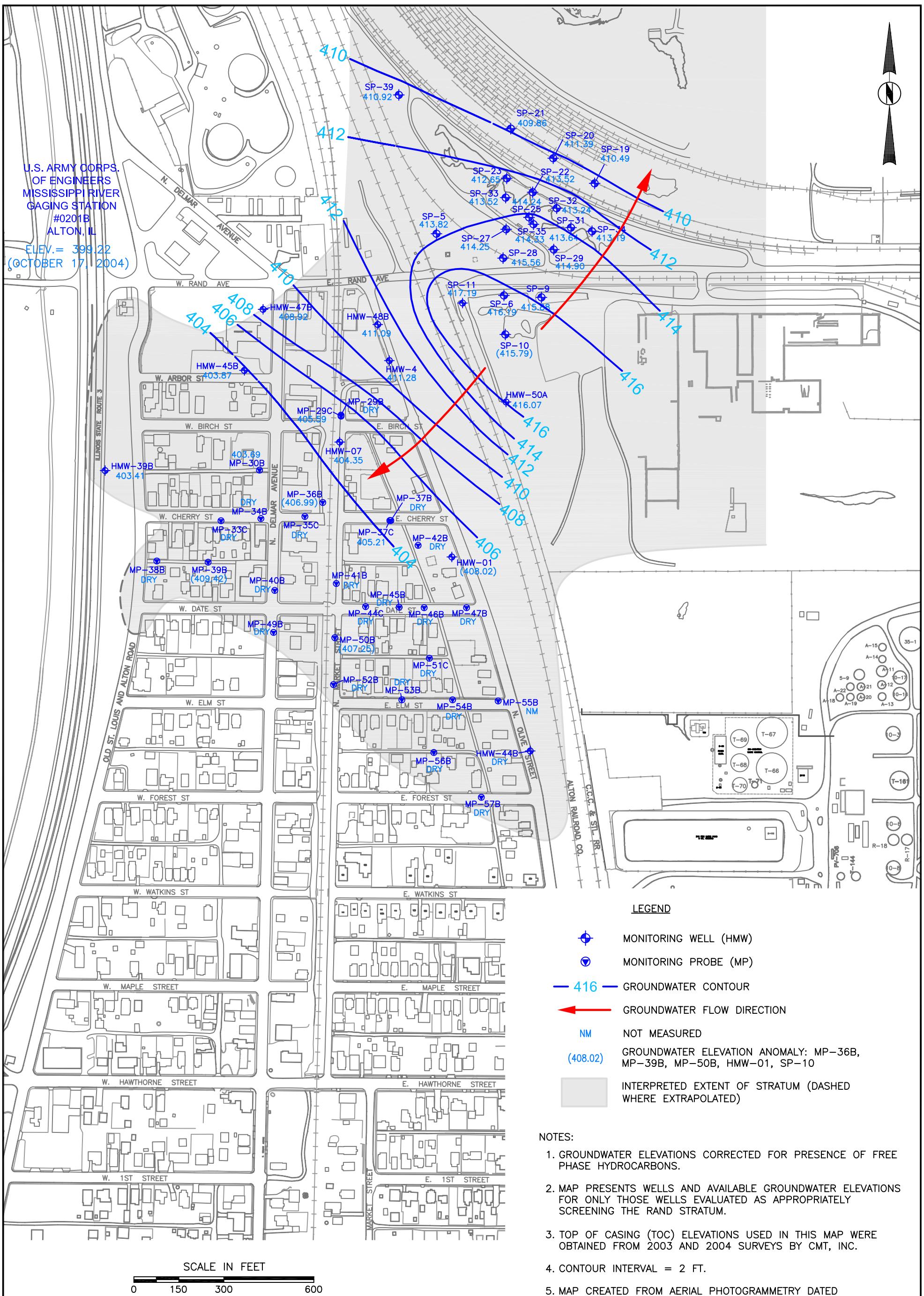
GROUNDWATER FLOW MAP  
OCTOBER 18-21, 2004 – EPA STRATUM

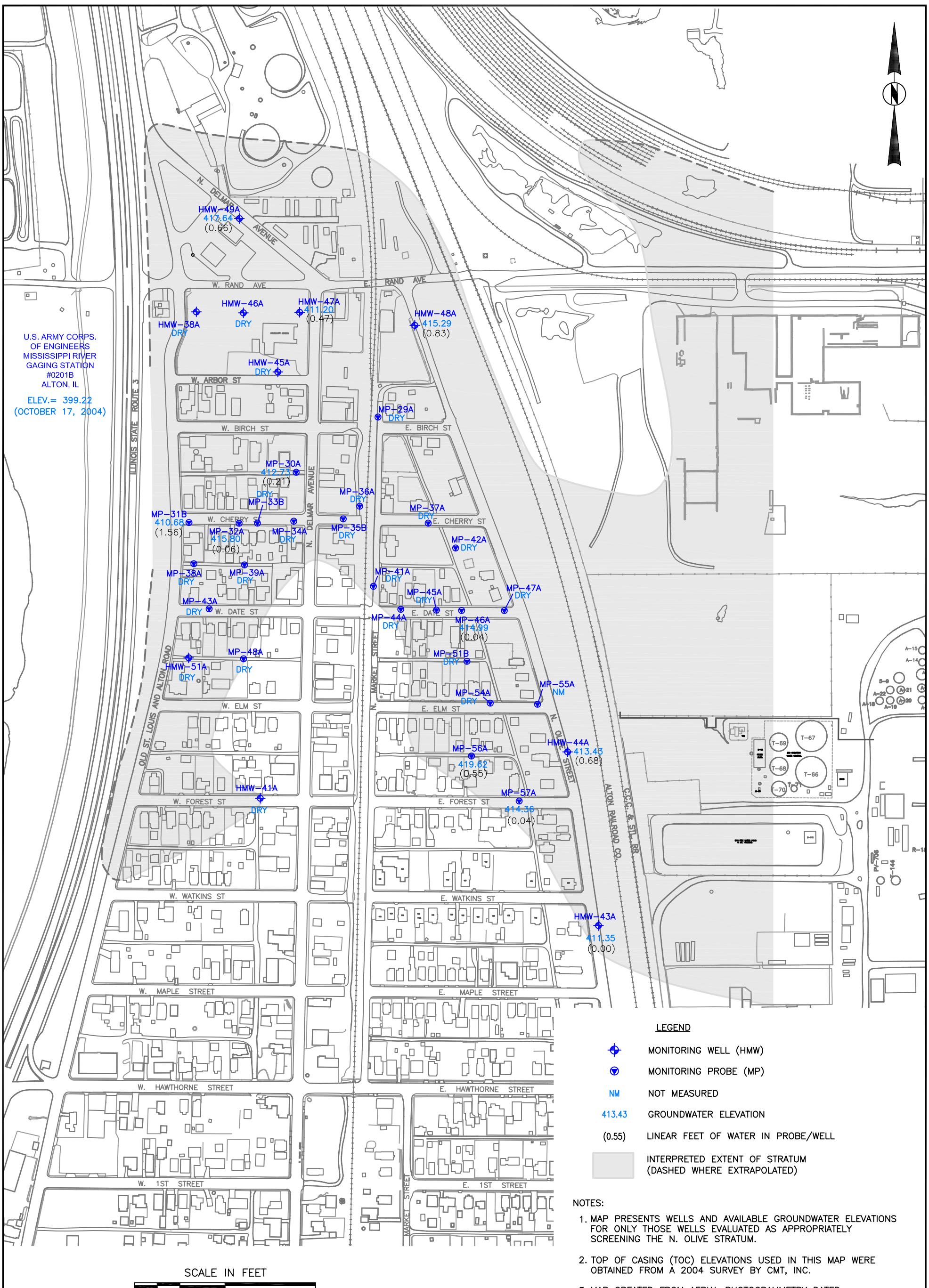
THE HARTFORD AREA HYDROCARBON PLUME SITE  
THE HARTFORD WORKING GROUP  
HARTFORD, ILLINOIS

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GROUP SERVICES

FIGURE

4





CHECK BY KDC

DRAWN BY BCP

DATE 12-15-04

SCALE AS SHOWN

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PRJ NO. 15-03095

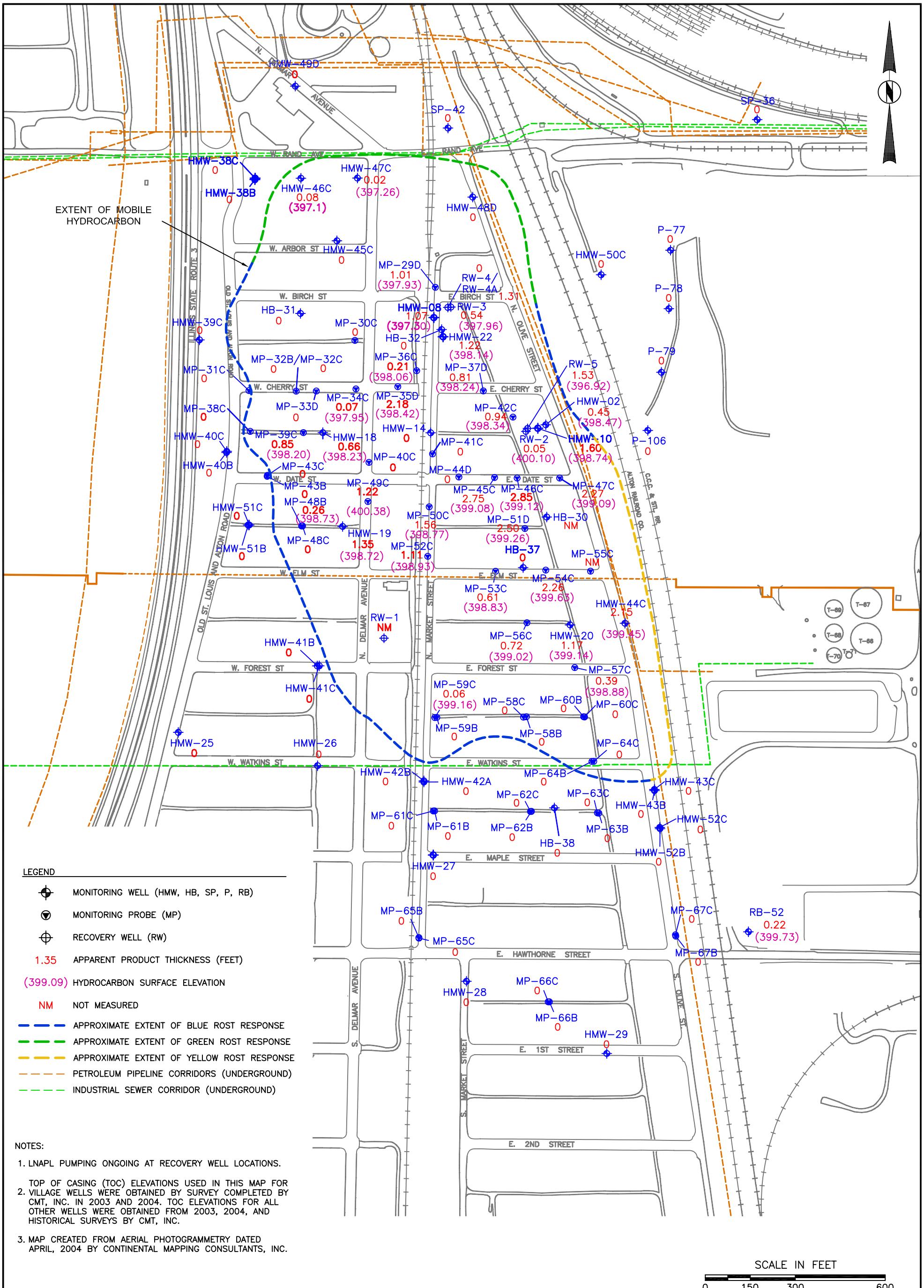
GROUNDWATER ELEVATION MAP  
OCTOBER 18–21, 2004 – N. OLIVE STRATUM

THE HARTFORD AREA HYDROCARBON PLUME SITE  
THE HARTFORD WORKING GROUP  
HARTFORD, ILLINOIS



FIGURE

6



CHECK BY KDC
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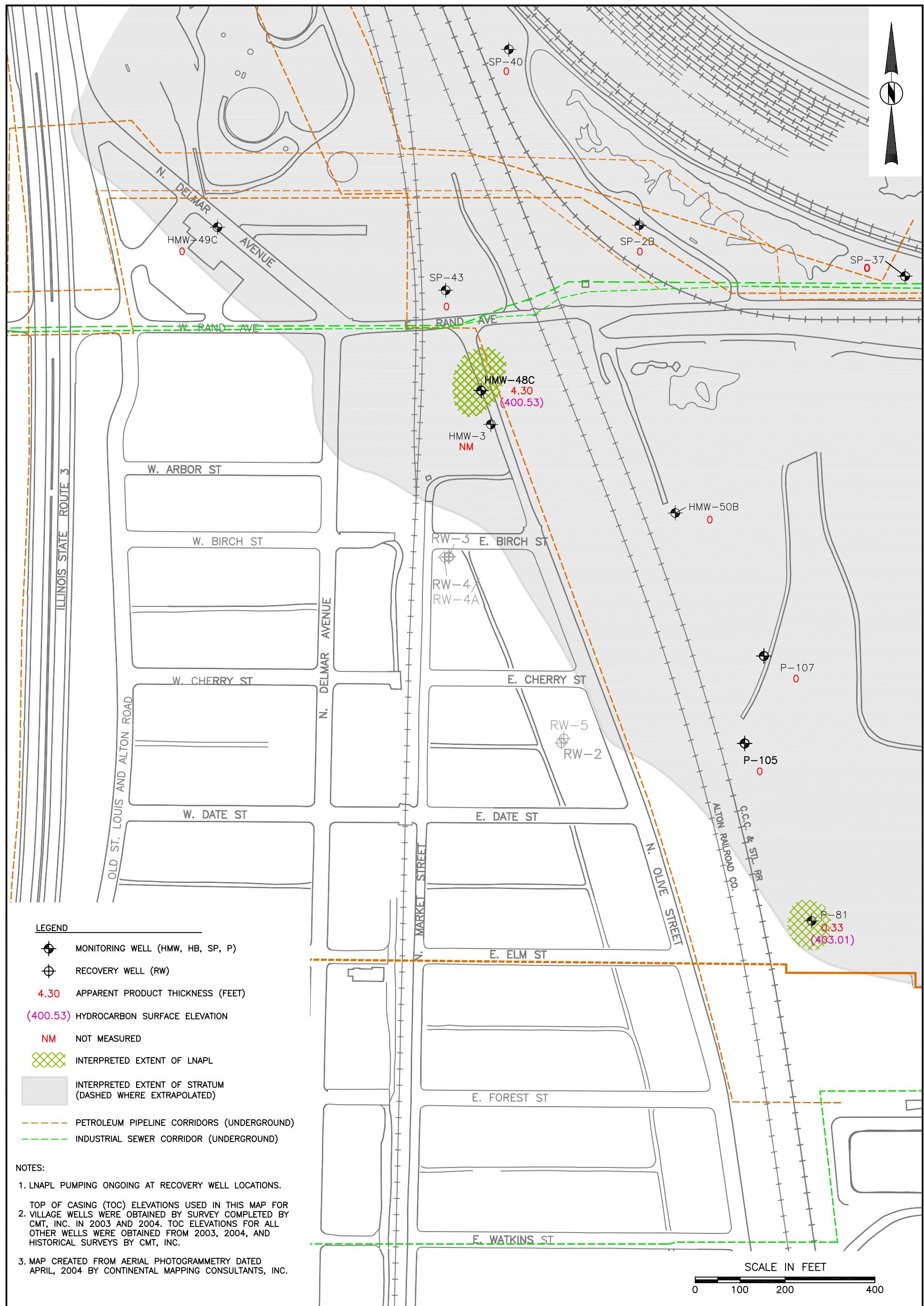
APPARENT LNAPL PRODUCT THICKNESS AND ELEVATION MAP  
OCTOBER 18–21, 2004 – MAIN SAND

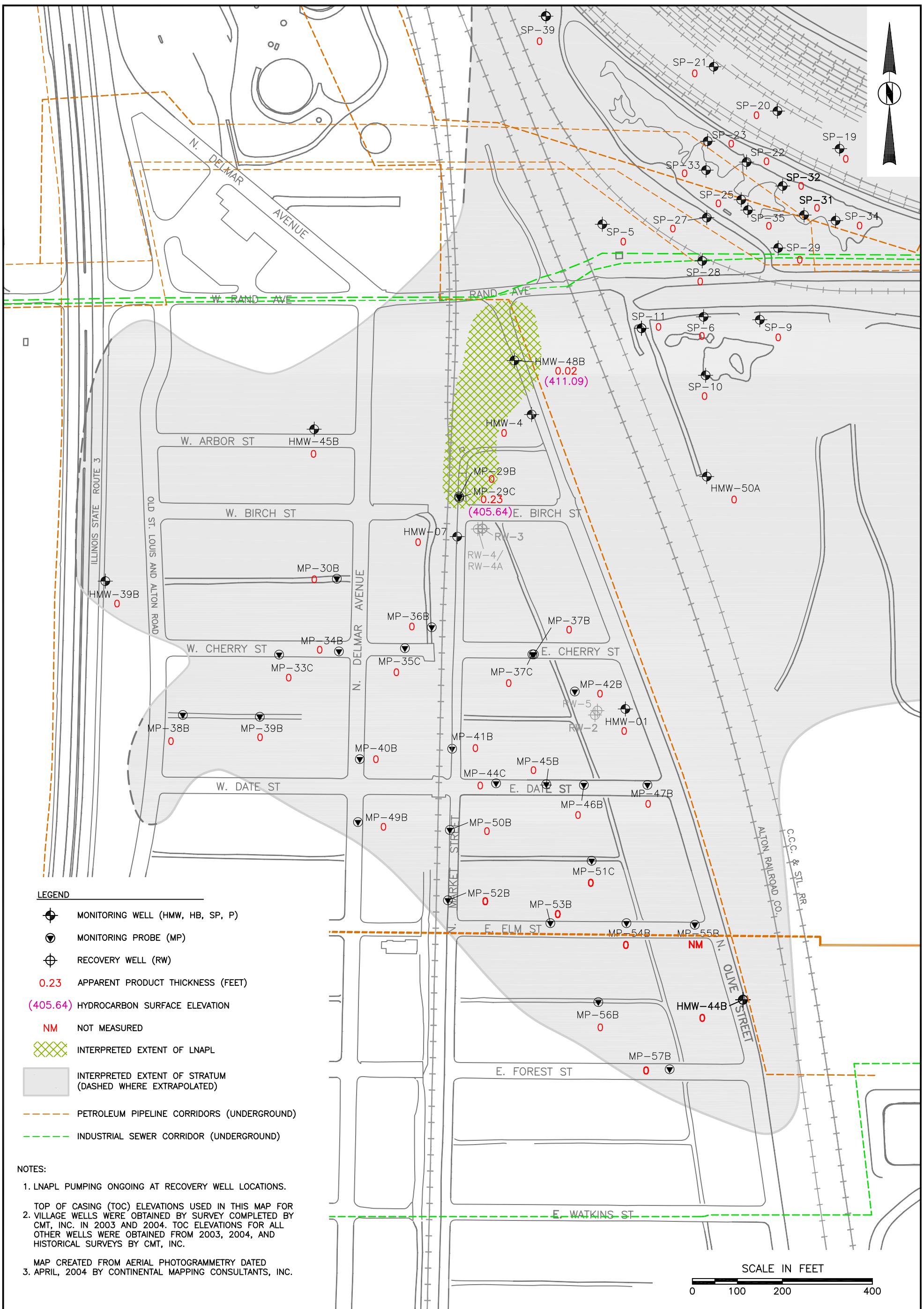
THE HARTFORD AREA HYDROCARBON PLUME SITE  
THE HARTFORD WORKING GROUP  
HARTFORD, ILLINOIS



FIGURE

7





CHECK BY	
DRAWN BY BCP	
DATE 12-15-04	
SCALE AS SHOWN	
CAD NO. 0309514007d3	
PRJ NO. 15-03095	

APPARENT LNAPL PRODUCT THICKNESS AND ELEVATION MAP

OCTOBER 18-21, 2004 – RAND STRATUM

THE HARTFORD AREA HYDROCARBON PLUME SITE

THE HARTFORD WORKING GROUP

HARTFORD, ILLINOIS



FIGURE

9

Tables

**Tables**

## TABLES

**TABLE 1**  
**Quarterly 2004 Groundwater Elevations/Apparent Product Thickness**  
*Village of Hartford, Illinois*

The Hartford Working Group / Hartford, Illinois  
 1190505040 -- Madison County -- ILR 000128249

WELL	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	Piezometric Surface Elevation <sup>1</sup> (ft)
IEPA-4	01/27/04	--	--	--	--	--	--	--
	04/20/04	430.35	30.35	31.71	400.00	398.64	1.36	399.69
	07/14/04	430.35	27.68	29.92	402.67	400.43	2.24	402.15
	10/21/04	430.35	31.18	32.89	399.17	397.46	1.71	398.78
HB-07 <sup>2</sup>	01/27/04	432.32	PLUGGED	PLUGGED	PLUGGED	PLUGGED	PLUGGED	PLUGGED
HB-16 <sup>3</sup>	01/27/04	431.42	--	--	--	--	--	--
	04/20/04	431.42	32.15	32.86	399.27	398.56	0.71	399.11
	07/14/04	431.42	--	--	--	--	--	--
	10/21/04	431.42	--	--	--	--	--	--
HB-27 <sup>2</sup>	07/14/04	425.83	PLUGGED	PLUGGED	PLUGGED	PLUGGED	PLUGGED	PLUGGED
HB-30	01/27/04	431.08	--	--	--	--	--	--
	04/20/04	431.08	31.03	32.25	400.05	398.83	1.22	399.77
	07/14/04	431.08	28.13	30.86	402.95	400.22	2.73	402.32
	10/21/04	431.08	--	--	--	--	--	--
HB-31 <sup>3</sup>	01/27/04	431.49	NA	35.43	NA	396.06	0.00	396.06
	04/21/04	431.49	NA	33.25	NA	398.24	0.00	398.24
	07/14/04	431.49	NA	29.88	NA	401.61	0.00	401.61
	10/21/04	431.49	NA	34.06	NA	397.43	0.00	397.43
HB-32 <sup>4</sup>	01/27/04	433.33	NA	36.94	NA	396.39	0.00	396.39
	04/20/04	433.33	NA	34.59	NA	398.74	0.00	398.74
	07/14/04	433.33	NA	31.68	NA	401.65	0.00	401.65
	10/21/04	433.33	NA	35.59	NA	397.74	0.00	397.74
HB-33 <sup>4</sup>	01/27/04	430.23	--	--	--	--	--	--
	04/21/04	430.23	NA	29.48	NA	400.75	0.00	400.75
	07/14/04	430.23	NA	26.23	NA	404.00	0.00	404.00
	10/21/04	430.23	NA	29.72	NA	400.51	0.00	400.51
HB-37	01/27/04	431.77	33.94	34.27	397.83	397.50	0.33	397.75
	04/21/04	431.77	NA	32.03	NA	399.74	0.00	399.74
	07/14/04	431.77	NA	29.16	NA	402.61	0.00	402.61
	10/20/04	431.77	NA	33.06	NA	398.71	0.00	398.71
HB-38	01/27/04	429.92	--	--	--	--	--	--
	04/21/04	429.92	NA	29.36	NA	400.56	0.00	400.56
	07/14/04	429.92	NA	26.52	NA	403.40	0.00	403.40
	10/19/04	429.92	NA	30.42	NA	399.50	0.00	399.50

**TABLE 1**  
**Quarterly 2004 Groundwater Elevations/Apparent Product Thickness**  
*Village of Hartford, Illinois*

**The Hartford Working Group / Hartford, Illinois**  
**1190505040 -- Madison County -- ILR 000128249**

WELL	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	Piezometric Surface Elevation <sup>1</sup> (ft)
HMW-01	01/27/04	429.97	NA	19.78	NA	410.19	0.00	410.19
	04/20/04	429.97	NA	19.50	NA	410.47	0.00	410.47
	07/14/04	429.97	NA	19.84	NA	410.13	0.00	410.13
	**10/21/04	429.97	NA	21.95	NA	408.02	0.00	408.02
HMW-02	01/27/04	429.65	32.11	32.88	397.54	396.77	0.77	397.36
	04/20/04	429.65	29.96	30.65	399.69	399.00	0.69	399.53
	07/14/04	429.65	27.45	27.88	402.20	401.77	0.43	402.10
	10/21/04	429.65	31.18	31.63	398.47	398.02	0.45	398.37
HMW-03	01/27/04	428.72	NA	28.61	NA	400.11	0.00	400.11
	04/20/04	428.72	NA	26.60	NA	402.12	0.00	402.12
	07/14/04	428.72	NA	23.60	NA	405.12	0.00	405.12
	10/21/04	428.72	--	--	--	--	--	--
HMW-04	01/27/04	428.96	10.93	10.94	418.03	418.02	0.01	418.03
	04/20/04	428.96	NA	12.01	NA	416.95	0.00	416.95
	07/14/04	428.96	NA	8.84	NA	420.12	0.00	420.12
	10/19/04	428.96	NA	17.68	NA	411.28	0.00	411.28
HMW-07 <sup>4</sup>	01/27/04	429.12	NA	24.76	NA	404.36	0.00	404.36
	04/20/04	429.12	NA	24.49	NA	404.63	0.00	404.63
	07/14/04	429.12	NA	22.60	NA	406.52	0.00	406.52
	10/20/04	429.12	NA	24.77	NA	404.35	0.00	404.35
HMW-08 <sup>4</sup>	01/27/04	429.74	32.85	34.15	396.89	395.59	1.30	396.59
	04/20/04	429.74	30.43	32.86	399.31	396.88	2.43	398.75
	07/14/04	429.74	26.76	32.55	402.98	397.19	5.79	401.65
	10/20/04	429.74	32.44	33.51	397.30	396.23	1.07	397.05
HMW-09	01/27/04	430.23	--	N/A	DRY	--	0.00	--
	04/20/04	430.23	--	N/A	DRY	--	DRY	--
	07/14/04	430.23	NA	23.19	NA	407.04	0.00	407.04
	10/21/04	430.23	NA	23.17	NA	407.06	0.00	407.06
HMW-10	01/27/04	430.20	32.57	34.17	397.63	396.03	1.60	397.26
	04/20/04	430.20	30.47	31.76	399.73	398.44	1.29	399.43
	07/14/04	430.20	27.18	31.16	403.02	399.04	3.98	402.10
	10/21/04	430.20	31.46	33.06	398.74	397.14	1.60	398.37

**TABLE 1**  
**Quarterly 2004 Groundwater Elevations/Apparent Product Thickness**  
*Village of Hartford, Illinois*

The Hartford Working Group / Hartford, Illinois  
 1190505040 -- Madison County -- ILR 000128249

WELL	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	Piezometric Surface Elevation <sup>1</sup> (ft)
HMW-13	01/27/04	430.81	NA	18.67	NA	412.14	0.00	412.14
	04/20/04	430.81	NA	18.70	NA	412.11	0.00	412.11
	07/14/04	431.81	NA	18.68	NA	413.13	0.00	413.13
	10/20/04	431.81	NA	18.68	NA	413.13	0.00	413.13
HMW-14	01/27/04	430.86	33.63	34.96	397.23	395.90	1.33	396.92
	04/20/04	430.86	31.43	32.44	399.43	398.42	1.01	399.20
	07/14/04	430.86	28.35	29.79	402.51	401.07	1.44	402.18
	10/20/04	430.86	NA	32.57	NA	398.29	0.00	398.29
HMW-18	01/27/04	431.58	34.55	36.12	397.03	395.46	1.57	396.67
	04/21/04	431.58	32.61	33.06	398.97	398.52	0.45	398.87
	07/14/04	431.58	28.75	31.44	402.83	400.14	2.69	402.21
	10/19/04	431.58	33.35	34.01	398.23	397.57	0.66	398.08
HMW-19	01/27/04	431.80	34.90	35.72	396.90	396.08	0.82	396.71
	04/21/04	431.80	32.29	33.29	399.51	398.51	1.00	399.28
	07/14/04	431.80	28.58	31.30	403.22	400.50	2.72	402.59
	10/19/04	431.80	33.08	34.43	398.72	397.37	1.35	398.41
HMW-20	01/27/04	430.65	32.91	33.86	397.74	396.79	0.95	397.52
	04/21/04	430.65	30.00	33.31	400.65	397.34	3.31	399.89
	07/14/04	430.65	26.50	32.70	404.15	397.95	6.20	402.72
	10/20/04	430.65	31.51	32.68	399.14	397.97	1.17	398.87
HMW-21 <sup>4</sup>	01/27/04	430.05	NA	21.93	NA	408.12	0.00	408.12
	04/20/04	430.05	NA	21.42	NA	408.63	0.00	408.63
	07/14/04	430.05	NA	19.38	NA	410.67	0.00	410.67
	10/21/04	430.05	NA	22.19	NA	407.86	0.00	407.86
HMW-22 <sup>4</sup>	01/27/04	430.15	33.20	35.00	396.95	395.15	1.80	396.54
	04/20/04	430.15	31.25	31.42	398.90	398.73	0.17	398.86
	07/14/04	430.15	27.24	32.55	402.91	397.60	5.31	401.69
	10/21/04	430.15	32.01	33.23	398.14	396.92	1.22	397.86
HMW-25	01/27/04	427.45	NA	29.96	NA	397.49	0.00	397.49
	04/21/04	427.45	NA	27.34	NA	400.11	0.00	400.11
	07/14/04	427.45	NA	23.62	NA	403.83	0.00	403.83
	10/18/04	427.45	NA	28.56	NA	398.89	0.00	398.89

**TABLE 1**  
**Quarterly 2004 Groundwater Elevations/Apparent Product Thickness**  
*Village of Hartford, Illinois*

**The Hartford Working Group / Hartford, Illinois**  
**1190505040 -- Madison County -- ILR 000128249**

WELL	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	Piezometric Surface Elevation <sup>1</sup> (ft)
HMW-26	01/27/04	425.20	NA	27.15	NA	398.05	0.00	398.05
	04/21/04	425.20	NA	24.64	NA	400.56	0.00	400.56
	**07/14/04	425.20	NA	24.15	NA	401.05	0.00	401.05
	10/18/04	425.20	NA	25.47	NA	399.73	0.00	399.73
HMW-27 <sup>5</sup>	01/27/04	430.75	NA	32.21	NA	398.54	0.00	398.54
	04/22/04	430.75	NA	29.90	NA	400.85	0.00	400.85
	07/14/04	430.75	NA	26.37	NA	404.38	0.00	404.38
	10/19/04	430.75	NA	30.75	NA	400.00	0.00	400.00
HMW-28	01/27/04	430.97	NA	32.05	NA	398.92	0.00	398.92
	04/21/04	430.97	NA	29.69	NA	401.28	0.00	401.28
	07/14/04	430.97	NA	26.42	NA	404.55	0.00	404.55
	10/18/04	430.97	NA	30.74	NA	400.23	0.00	400.23
HMW-29	01/27/04	429.99	NA	30.64	NA	399.35	0.00	399.35
	04/21/04	429.99	NA	28.70	NA	401.29	0.00	401.29
	07/14/04	429.99	NA	25.54	NA	404.45	0.00	404.45
	10/18/04	429.99	NA	28.97	NA	401.02	0.00	401.02
HMW-30 <sup>4</sup>	04/20/04	430.07	NA	31.29	NA	398.78	0.00	398.78
	07/14/04	430.07	NA	28.38	NA	401.69	0.00	401.69
	10/21/04	430.07	32.17	32.45	397.90	397.62	0.28	397.84
	04/20/04	430.09	NA	31.27	NA	398.82	0.00	398.82
HMW-31 <sup>4</sup>	07/14/04	430.09	NA	28.41	NA	401.68	0.00	401.68
	10/21/04	430.09	NA	32.27	NA	397.82	0.00	397.82
	04/20/04	430.01	NA	31.11	NA	398.90	0.00	398.90
HMW-32 <sup>4</sup>	07/14/04	430.01	NA	27.38	NA	402.63	0.00	402.63
	10/21/04	430.01	NA	32.98	NA	397.03	0.00	397.03
	04/20/04	430.13	NA	31.27	NA	398.86	0.00	398.86
HMW-33 <sup>4</sup>	07/14/04	430.13	28.49	28.79	401.64	401.34	0.30	401.57
	10/21/04	430.13	31.92	33.54	398.21	396.59	1.62	397.84
	07/14/04	--	28.82	30.77	--	--	1.95	--
HMW-34	10/21/04	429.83	31.17	32.56	398.66	397.27	1.39	398.34
	07/14/04	--	NA	27.78	--	--	0.00	--
HMW-35	10/21/04	429.81	NA	31.50	NA	398.31	0.00	398.31
	07/14/04	--	26.60	31.71	--	--	5.11	--
HMW-36	10/21/04	429.91	31.06	32.88	398.85	397.03	1.82	398.43

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*Village of Hartford, Illinois*

The Hartford Working Group / Hartford, Illinois  
 1190505040 -- Madison County -- ILR 000128249

WELL	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	Piezometric Surface Elevation (ft)
HMW-37	07/14/04	--	27.13	28.78	--	--	1.65	--
	10/21/04	429.61	30.87	32.45	398.74	397.16	1.58	398.38
HMW-38 A	10/19/04	430.06	NA	DRY	--	--	0.00	--
HMW-38 B	10/19/04	430.24	NA	25.19	NA	405.05	0.00	405.05
HMW-38 C	10/19/04	430.01	NA	33.07	NA	396.94	0.00	396.94
HMW-39 A	10/18/04	426.46	NA	DRY	NA	--	0.00	--
HMW-39 B	10/18/04	426.50	NA	23.09	NA	403.41	0.00	403.41
HMW-39 C	10/18/04	426.46	NA	29.25	NA	397.21	0.00	397.21
HMW-40 A	10/19/04	425.01	NA	DRY	NA	--	0.00	--
HMW-40 B	10/19/04	424.86	NA	24.29	NA	400.57	0.00	400.57
HMW-40 C	10/19/04	424.75	NA	27.06	NA	397.69	0.00	397.69
HMW-41 A	10/19/04	425.42	NA	DRY	--	--	0.00	--
HMW-41 B	10/19/04	425.91	NA	26.45	NA	399.46	0.00	399.46
HMW-41 C	10/19/04	426.75	NA	26.95	NA	399.80	0.00	399.80
HMW-42 A	10/19/04	431.39	NA	DRY	NA	--	0.00	--
HMW-42 B	10/19/04	431.46	NA	31.64	NA	399.82	0.00	399.82
HMW-43 A	10/19/04	428.73	NA	17.38	NA	411.35	0.00	411.35
HMW-43 B	10/19/04	428.94	NA	DRY	--	--	0.00	--
HMW-43 C	10/19/04	428.80	NA	29.56	--	399.24	0.00	399.24
HMW-44 B	10/20/04	429.46	NA	DRY	--	--	0.00	--
HMW-44 C	10/20/04	429.44	29.99	32.14	399.45	397.30	2.15	398.96
HMW-45 A	10/19/04	431.17	NA	DRY	--	--	0.00	--
HMW-45 B	10/19/04	431.22	NA	27.35	NA	403.87	0.00	403.87
HMW-45 C	10/19/04	430.87	NA	33.53	NA	397.34	0.00	397.34
HWM-46 A	10/19/04	430.51	NA	DRY	NA	--	0.00	--
HMW-46 B	10/19/04	430.61	NA	24.26	NA	406.35	0.00	406.35
HMW-46 C	10/19/04	430.49	33.39	33.47	397.10	397.02	0.08	397.08
HMW-47 A	10/19/04	430.50	NA	19.30	NA	411.20	0.00	411.20
HMW-47 B	10/19/04	430.13	NA	21.21	NA	408.92	0.00	408.92
HMW-48 A	10/19/04	429.16	NA	13.87	NA	415.29	0.00	415.29
HMW-48 B	10/19/04	429.18	18.09	18.11	411.09	411.07	0.02	411.09
HMW-48 C	**10/19/04	429.10	28.57	32.87	400.53	396.23	4.30	399.54
HMW-48 D	10/19/04	428.98	NA	31.29	NA	397.69	0.00	397.69
HMW-49 A	10/19/04	430.21	NA	12.57	NA	417.64	0.00	417.64
HMW-49 B	10/19/04	430.23	NA	23.35	NA	406.88	0.00	406.88
HMW-49 C	10/19/04	430.21	NA	31.86	NA	398.35	0.00	398.35

**TABLE 1**  
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*Village of Hartford, Illinois*

**The Hartford Working Group / Hartford, Illinois**  
**1190505040 -- Madison County -- ILR 000128249**

WELL	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	Piezometric Surface Elevation (ft)
HMW-49 D	10/19/04	430.33	NA	33.41	NA	396.92	0.00	396.92
HMW-50 A	10/19/04	434.41	NA	18.34	NA	416.07	0.00	416.07
HMW-50 B	10/19/04	434.15	NA	32.58	NA	401.57	0.00	401.57
HMW-50 C	10/19/04	434.29	NA	35.98	NA	398.31	0.00	398.31
HMW-51 A	10/19/04	425.46	NA	DRY	NA	--	0.00	--
HMW-51 B	10/19/04	425.51	NA	24.74	NA	400.77	0.00	400.77
HMW-51 C	10/19/04	425.42	NA	27.34	NA	398.08	0.00	398.08
HMW-52 A	10/19/04	427.80	NA	20.07	NA	407.73	0.00	407.73
HMW-52 B	10/19/04	427.81	NA	26.68	NA	401.13	0.00	401.13
HMW-52 C	**10/19/04	427.83	NA	26.48	NA	401.35	0.00	401.35
RW-1	01/27/04	433.78	NA	36.18	NA	397.60	0.00	397.60
	04/21/04	433.78	NA	33.93	NA	399.85	0.00	399.85
	07/14/04	433.78	NA	30.75	NA	403.03	0.00	403.03
	10/20/04	433.78	--	--	--	--	--	--
RW-2	01/27/04	431.99	34.39	35.95	397.60	396.04	1.56	397.24
	04/20/04	431.99	32.28	33.68	399.71	398.31	1.40	399.39
RW-2	07/14/04	431.99	29.06	32.78	402.93	399.21	3.72	402.07
	10/21/04	431.99	31.89	31.94	400.10	400.05	0.05	400.09
RW-3 <sup>4</sup>	01/27/04	433.35	36.46	38.30	396.89	395.05	1.84	396.47
	04/20/04	433.35	34.34	35.48	399.01	397.87	1.14	398.75
	07/14/04	433.35	31.69	31.77	401.66	401.58	0.08	401.64
	10/22/04	433.35	35.39	35.93	397.96	397.42	0.54	397.84
RW-4 <sup>4</sup>	01/27/04	429.65	--	--	--	--	--	--
	04/20/04	429.65	--	--	--	--	--	--
	07/14/04	429.65	NA	27.79	NA	401.86	0.00	401.86
	10/21/04	429.65	NA	31.76	NA	397.89	0.00	397.89
RW-4A*	01/27/04	--	--	--	--	--	--	--
	04/20/04	--	--	--	--	--	--	--
	07/14/04	--	26.76	32.84	--	--	6.08	--
	10/21/04	--	31.70	33.01	--	--	1.31	--
RW-5	01/27/04	--	--	--	--	--	--	--
	04/20/04	--	--	--	--	--	--	--
	07/14/04	--	26.23	29.30	--	--	3.07	--
	10/21/04	430.22	33.30	34.83	396.92	395.39	1.53	396.57

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WELL	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	Piezometric Surface Elevation <sup>1</sup> (ft)
MP-5S	01/27/04	429.83	NA	9.26	NA	420.57	0.00	420.57
	04/20/04	429.83	NA	DRY	--	--	0.00	--
	07/14/04	429.83	--	--	--	--	--	--
	10/21/04	429.83	--	--	--	--	--	--
MP-5D	01/27/04	430.09	NA	21.33	NA	408.76	0.00	408.76
	04/20/04	430.09	NA	20.38	NA	409.71	0.00	409.71
	07/14/04	430.09	--	--	--	--	--	--
	10/21/04	430.09	--	--	--	--	--	--
MP-6S	01/27/04	430.15	NA	DRY	--	--	0.00	--
	04/20/04	430.15	NA	DRY	--	--	0.00	--
	07/14/04	430.15	--	--	--	--	--	--
	10/21/04	430.15	--	--	--	--	--	--
MP-6D	01/27/04	430.13	NA	21.31	NA	408.82	0.00	408.82
	04/20/04	430.13	NA	20.40	NA	409.73	0.00	409.73
	07/14/04	430.13	--	--	--	--	--	--
	10/21/04	430.13	--	--	--	--	--	--
MP-7S	01/27/04	430.17	NA	7.21	NA	422.96	0.00	422.96
	04/20/04	430.17	NA	5.41	NA	424.76	0.00	424.76
	07/14/04	430.17	--	--	--	--	--	--
	10/21/04	430.17	--	--	--	--	--	--
MP-7D	01/27/04	430.16	NA	21.38	NA	408.78	0.00	408.78
	04/20/04	430.16	NA	20.64	NA	409.52	0.00	409.52
	07/14/04	430.16	--	--	--	--	--	--
	10/21/04	430.16	--	--	--	--	--	--
MP-8S	01/27/04	430.20	NA	DRY	--	--	0.00	--
	04/20/04	430.20	NA	DRY	--	--	0.00	--
	07/14/04	430.20	--	--	--	--	--	--
	10/21/04	430.20	--	--	--	--	--	--
MP-8D	01/27/04	430.14	--	--	--	--	--	--
	04/21/04	430.14	21.64	21.73	408.50	408.41	0.09	408.48
	07/14/04	430.14	19.63	19.66	410.51	410.48	0.03	410.50
	10/21/04	430.14	--	--	--	--	--	--
MP-9S	01/27/04	430.05	NA	8.19	NA	421.86	0.00	421.86
	04/20/04	430.05	NA	7.76	NA	422.29	0.00	422.29
	07/14/04	430.05	NA	4.32	NA	425.73	0.00	425.73
	10/21/04	430.05	NA	5.89	NA	424.16	0.00	424.16

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WELL	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	Piezometric Surface Elevation (ft)
MP-9D	01/27/04	430.00	21.40	21.41	408.60	408.59	0.01	408.60
	04/21/04	430.00	20.89	20.90	409.11	409.10	0.01	409.11
	07/14/04	430.00	18.72	19.92	411.28	410.08	1.20	411.00
	10/21/04	430.00	22.02	23.88	407.98	406.12	1.86	407.55
MP-10S	01/27/04	430.53	NA	DRY	--	--	0.00	--
	04/21/04	430.53	NA	DRY	--	--	0.00	--
	07/14/04	430.53	NA	DRY	--	--	0.00	--
	10/19/04	430.53	NA	9.90	NA	420.63	0.00	420.63
MP-10D	01/27/04	430.37	NA	19.70	NA	410.67	0.00	410.67
	04/21/04	430.37	NA	19.27	NA	411.10	0.00	411.10
	07/14/04	430.37	NA	17.62	NA	412.75	0.00	412.75
	10/19/04	430.37	NA	21.86	NA	408.51	0.00	408.51
MP-11S	01/27/04	431.19	NA	DRY	--	--	0.00	--
	04/21/04	431.19	NA	DRY	--	--	0.00	--
	07/14/04	431.19	NA	DRY	--	--	0.00	--
	10/19/04	431.19	--	--	--	--	--	--
MP-11D	01/27/04	431.19	NA	19.82	NA	411.37	0.00	411.37
	04/21/04	431.19	NA	19.62	NA	411.57	0.00	411.57
	07/14/04	431.19	NA	17.87	NA	413.32	0.00	413.32
	10/19/04	431.19	--	--	--	--	--	--
MP-12S	01/27/04	431.70	--	--	--	--	--	--
	04/21/04	431.70	NA	DRY	--	--	0.00	--
	07/14/04	431.70	NA	DRY	--	--	0.00	--
	10/19/04	431.70	--	--	--	--	--	--
MP-12D	01/27/04	431.63	--	--	--	--	--	--
	04/21/04	431.63	NA	19.50	NA	412.13	0.00	412.13
	07/14/04	431.63	NA	17.95	NA	413.68	0.00	413.68
	10/19/04	431.63	--	--	--	--	--	--
MP-13S	01/27/04	429.20	NA	7.97	NA	421.23	0.00	421.23
	04/21/04	429.20	NA	8.38	NA	420.82	0.00	420.82
	07/14/04	429.20	NA	7.84	NA	421.36	0.00	421.36
	10/20/04	429.20	NA	9.60	NA	419.60	0.00	419.60
MP-13D	01/27/04	429.30	NA	DRY	--	--	0.00	--
	04/21/04	429.30	NA	DRY	--	--	0.00	--
	07/14/04	429.30	NA	26.20	NA	403.10	0.00	403.10
	10/20/04	429.30	NA	27.55	NA	401.75	0.00	401.75

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 1190505040 -- Madison County -- ILR 000128249

WELL	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	Piezometric Surface Elevation <sup>1</sup> (ft)
MP-14S	01/27/04	429.51	--	--	--	--	--	--
	04/21/04	429.51	NA	9.04	NA	420.47	0.00	420.47
	07/14/04	429.51	NA	8.17	NA	421.34	0.00	421.34
	10/20/04	429.51	NA	DRY	--	--	0.00	--
MP-14D	01/27/04	429.51	--	--	--	--	--	--
	04/21/04	429.51	NA	DRY	--	--	0.00	--
	07/14/04	429.51	NA	DRY	--	--	0.00	--
	10/20/04	429.51	NA	26.79	NA	402.72	0.00	402.72
MP-15S	01/27/04	429.63	NA	6.01	NA	423.62	0.00	423.62
	04/21/04	429.63	NA	9.04	NA	420.59	0.00	420.59
	07/14/04	429.63	NA	DRY	--	--	0.00	--
	10/20/04	429.63	NA	8.71	NA	420.92	0.00	420.92
MP-15D	01/27/04	429.58	--	--	--	--	--	--
	04/21/04	429.58	NA	DRY	--	--	0.00	--
	07/14/04	429.58	NA	DRY	--	--	0.00	--
	10/20/04	429.58	NA	26.81	NA	402.77	0.00	402.77
MP-16S	01/27/04	429.75	--	--	--	--	--	--
	04/21/04	429.75	NA	DRY	--	--	0.00	--
	07/14/04	429.75	NA	DRY	--	--	0.00	--
	10/20/04	429.75	NA	DRY	--	--	0.00	--
MP-16D	01/27/04	429.77	NA	DRY	--	--	0.00	--
	04/21/04	429.77	NA	DRY	--	--	0.00	--
	07/14/04	429.77	NA	DRY	--	--	0.00	--
	10/20/04	429.77	NA	27.60	NA	402.17	0.00	402.17
MP-25	07/14/04	--	NA	26.48	--	--	0.00	--
	10/21/04	429.71	NA	26.90	NA	402.81	0.00	402.81
MP-26	07/14/04	--	NA	25.37	--	--	0.00	--
	10/21/04	429.54	NA	26.43	NA	403.11	0.00	403.11
MP-27	07/14/04	--	26.16	26.68	--	--	0.52	--
	10/21/04	429.55	27.86	28.16	401.69	401.39	0.30	401.62
MP-28	07/14/04	--	--	--	--	--	--	--
	10/21/04	429.80	NA	22.11	NA	407.69	0.00	407.69
MP-29 A	10/20/04	429.39	NA	DRY	--	--	0.00	--
MP-29 B	10/20/04	429.43	NA	DRY	--	--	0.00	--
MP-29 C	10/20/04	429.39	23.75	23.98	405.64	405.41	0.23	405.59
MP-29 D	10/20/04	429.47	31.54	32.55	397.93	396.92	1.01	397.70

**TABLE 1**  
**Quarterly 2004 Groundwater Elevations/Apparent Product Thickness**  
**Village of Hartford, Illinois**

**The Hartford Working Group / Hartford, Illinois**  
**1190505040 -- Madison County -- ILR 000128249**

WELL	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	Piezometric Surface Elevation! (ft)
MP-30 A	10/19/04	431.20	NA	18.47	NA	412.73	0.00	412.73
MP-30 B	10/19/04	431.21	NA	27.52	NA	403.69	0.00	403.69
MP-30 C	10/19/04	431.13	NA	33.45	NA	397.68	0.00	397.68
MP-31 A	10/19/04	426.71	NA	DRY	NA	--	0.00	--
MP-31 B	10/19/04	426.79	NA	16.11	NA	410.68	0.00	410.68
MP-31 C	10/19/04	426.98	NA	29.31	NA	397.67	0.00	397.67
MP-32 A	10/21/04	429.68	NA	13.88	NA	415.80	0.00	415.80
MP-32 B	10/21/04	429.68	NA	DRY	NA	--	0.00	--
MP-32 C	10/21/04	429.72	NA	32.06	NA	397.66	0.00	397.66
MP-33 A	10/19/04	430.05	NA	DRY	NA	--	0.00	--
MP-33 B	10/19/04	430.09	NA	DRY	NA	--	0.00	--
MP-33 C	10/19/04	430.09	NA	DRY	NA	--	0.00	--
MP-33 D	10/19/04	430.09	NA	32.24	NA	397.85	0.00	397.85
MP-34 A	10/19/04	430.73	NA	DRY	NA	--	0.00	--
MP-34 B	10/19/04	430.74	NA	DRY	NA	--	0.00	--
MP-34 C	10/19/04	430.62	32.67	32.74	397.95	397.88	0.07	397.93
MP-35 A	10/19/04	430.39	NA	DRY	NA	--	0.00	--
MP-35 B	10/19/04	430.41	NA	DRY	NA	--	0.00	--
MP-35 C	10/19/04	430.44	NA	DRY	NA	--	0.00	--
MP-35 D	10/19/04	430.43	32.01	34.19	398.42	396.24	2.18	397.92
MP-36 A	10/19/04	431.91	NA	DRY	NA	--	0.00	--
MP-36 B	**10/19/04	431.98	NA	24.99	NA	406.99	0.00	406.99
MP-36 C	10/19/04	431.99	33.93	34.14	398.06	397.85	0.21	398.01
MP-37 A	10/20/04	429.33	NA	DRY	NA	--	0.00	--
MP-37 B	10/20/04	428.99	NA	DRY	NA	--	0.00	--
MP-37 D	10/20/04	429.04	30.80	31.61	398.24	397.43	0.81	398.05
MP-38 A	10/19/04	427.17	NA	DRY	NA	--	0.00	--
MP-38 B	10/19/04	427.03	NA	DRY	NA	--	0.00	--
MP-38 C	10/19/04	426.91	NA	29.14	NA	397.77	0.00	397.77
MP-39 A	10/19/04	432.09	NA	DRY	NA	--	0.00	--
MP-39 B	**10/19/04	432.10	NA	22.68	NA	409.42	0.00	409.42
MP-39 C	10/19/04	432.07	33.87	34.72	398.20	397.35	0.85	398.00
MP-40 A	10/19/04	432.76	NA	10.36	NA	422.40	0.00	422.40
MP-40 B	10/19/04	432.78	NA	DRY	NA	--	0.00	--
MP-40 C	**10/19/04	432.77	NA	32.87	NA	399.90	0.00	399.90
MP-41 A	10/20/04	431.24	NA	DRY	NA	--	0.00	--

**TABLE 1**  
**Quarterly 2004 Groundwater Elevations/Apparent Product Thickness**  
*Village of Hartford, Illinois*

**The Hartford Working Group / Hartford, Illinois**  
**1190505040 -- Madison County -- ILR 000128249**

WELL	DATE	(A) Top of Casing (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	Piezometric Surface Elevation (ft)
MP-41 B	10/20/04	431.23	NA	DRY	NA	--	0.00	--
MP-41 C	10/20/04	431.09	NA	32.86	NA	398.23	0.00	398.23
MP-42 A	10/21/04	430.21	NA	DRY	NA	--	0.00	--
MP-42 B	10/21/04	430.20	NA	DRY	--	--	0.00	--
MP-42 C	10/21/04	430.32	31.98	32.92	398.34	397.40	0.94	398.12
MP-43 A	10/19/04	426.75	NA	DRY	NA	--	0.00	--
MP-43 B	10/19/04	426.72	NA	DRY	NA	--	0.00	--
MP-43 C	10/19/04	426.39	NA	28.39	NA	398.00	0.00	398.00
MP-44 A	10/20/04	430.64	NA	DRY	NA	--	0.00	--
MP-44 B	10/20/04	430.54	NA	DRY	--	--	0.00	--
MP-44 C	10/20/04	430.54	NA	DRY	--	--	0.00	--
MP-44 D	10/20/04	430.62	NA	32.27	NA	398.35	0.00	398.35
MP-45 A	10/20/04	430.04	NA	DRY	NA	--	0.00	--
MP-45 B	10/20/04	430.04	NA	DRY	NA	--	0.00	--
MP-45 C	10/20/04	429.93	30.85	33.60	399.08	396.33	2.75	398.45
MP-46 A	10/20/04	429.67	NA	14.68	NA	414.99	0.00	414.99
MP-46 B	10/20/04	429.65	NA	DRY	NA	--	0.00	--
MP-46 C	10/20/04	429.60	30.48	33.33	399.12	396.27	2.85	398.46
MP-47 A	10/20/04	429.12	NA	DRY	--	--	0.00	--
MP-47 B	10/20/04	429.11	NA	DRY	NA	--	0.00	--
MP-47 C	10/20/04	429.01	29.92	32.19	399.09	396.82	2.27	398.57
MP-48 A	10/19/04	429.29	NA	DRY	--	--	0.00	--
MP-48 B	10/19/04	429.29	30.56	30.82	398.73	398.47	0.26	398.67
MP-48 C	10/19/04	429.49	NA	31.27	NA	398.22	0.00	398.22
MP-49 A	10/19/04	432.81	NA	DRY	NA	--	0.00	--
MP-49 B	10/19/04	432.82	NA	DRY	NA	--	0.00	--
MP-49 C	10/19/04	432.80	32.42	33.64	400.38	399.16	1.22	400.10
MP-50 A	10/20/04	430.38	NA	10.72	NA	419.66	0.00	419.66
MP-50 B	**10/20/04	430.24	NA	22.99	NA	407.25	0.00	407.25
MP-50 C	10/20/04	430.23	31.46	33.02	398.77	397.21	1.56	398.41
MP-51 A	10/20/04	430.90	NA	DRY	NA	--	0.00	--
MP-51 B	10/20/04	430.91	NA	DRY	NA	--	0.00	--
MP-51 C	10/20/04	430.93	NA	DRY	NA	--	0.00	--
MP-51 D	10/20/04	430.99	31.73	34.23	399.26	396.76	2.50	398.69

**TABLE 1**  
**Quarterly 2004 Groundwater Elevations/Apparent Product Thickness**  
*Village of Hartford, Illinois*

**The Hartford Working Group / Hartford, Illinois**  
**1190505040 -- Madison County -- ILR 000128249**

WELL	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	Piezometric Surface Elevation (ft)
MP-52 A	10/20/04	429.96	NA	9.78	NA	420.18	0.00	420.18
MP-52 B	10/20/04	429.97	NA	DRY	NA	--	0.00	--
MP-52 C	10/20/04	429.99	31.06	32.17	398.93	397.82	1.11	398.67
MP-53 A	10/20/04	430.59	NA	11.67	NA	418.92	0.00	418.92
MP-53 B	10/20/04	430.60	NA	DRY	NA	--	0.00	--
MP-53 C	10/20/04	430.64	31.81	32.42	398.83	398.22	0.61	398.69
MP-54 A	10/20/04	430.00	NA	DRY	NA	--	0.00	--
MP-54 B	10/20/04	429.99	NA	DRY	NA	--	0.00	--
MP-54 C	**10/20/04	430.06	30.43	32.69	399.63	397.37	2.26	399.11
MP-55 A	10/20/04	429.65	--	--	--	--	--	--
MP-55 B	10/20/04	429.65	--	--	--	--	--	--
MP-55 C	10/20/04	429.67	--	--	--	--	--	--
MP-56 A	10/20/04	430.25	NA	10.63	NA	419.62	0.00	419.62
MP-56 B	10/20/04	430.25	NA	DRY	NA	--	0.00	--
MP-56 C	10/20/04	430.15	31.13	31.85	399.02	398.30	0.72	398.85
MP-57 A	10/20/04	429.05	NA	14.69	NA	414.36	0.00	414.36
MP-57 B	10/20/04	429.04	NA	DRY	NA	--	0.00	--
MP-57 C	10/20/04	428.99	30.11	30.50	398.88	398.49	0.39	398.79
MP-58 A	10/20/04	430.29	NA	DRY	--	--	0.00	--
MP-58 B	10/20/04	430.29	NA	DRY	NA	--	0.00	--
MP-58 C	10/20/04	430.33	NA	31.16	NA	399.17	0.00	399.17
MP-59 A	10/20/04	429.97	NA	8.59	NA	421.38	0.00	421.38
MP-59 B	10/20/04	429.88	NA	DRY	NA	--	0.00	--
MP-59 C	10/20/04	429.90	30.74	30.80	399.16	399.10	0.06	399.15
MP-60 A	10/20/04	429.21	NA	DRY	--	--	0.00	--
MP-60 B	10/20/04	429.20	NA	DRY	NA	--	0.00	--
MP-60 C	10/20/04	429.21	NA	30.23	NA	398.98	0.00	398.98
MP-61 A	10/19/04	429.98	NA	DRY	--	--	0.00	--
MP-61 B	10/19/04	429.88	NA	DRY	NA	--	0.00	--
MP-61 C	10/19/04	430.00	NA	30.19	NA	399.81	0.00	399.81
MP-62 A	10/19/04	429.11	NA	DRY	NA	--	0.00	--
MP-62 B	10/19/04	429.11	NA	DRY	NA	--	0.00	--
MP-62 C	10/19/04	428.94	NA	29.35	NA	399.59	0.00	399.59
MP-63 A	10/19/04	429.26	NA	9.53	NA	419.73	0.00	419.73
MP-63 B	10/19/04	429.26	NA	DRY	NA	--	0.00	--
MP-63 C	10/19/04	429.29	NA	29.74	NA	399.55	0.00	399.55

**TABLE 1**  
**Quarterly 2004 Groundwater Elevations/Apparent Product Thickness**  
*Village of Hartford, Illinois*

The Hartford Working Group / Hartford, Illinois  
 1190505040 -- Madison County -- ILR 000128249

WELL	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	Piezometric Surface Elevation <sup>1</sup> (ft)
MP-64 A	10/20/04	428.73	NA	8.67	NA	420.06	0.00	420.06
MP-64 B	10/20/04	428.74	NA	DRY	NA	--	0.00	--
MP-64 C	10/20/04	428.69	NA	29.15	NA	399.54	0.00	399.54
MP-65 A	10/18/04	431.41	NA	DRY	NA	--	0.00	--
MP-65 B	10/18/04	431.44	NA	DRY	NA	--	0.00	--
MP-65 C	10/18/04	431.54	NA	31.38	NA	400.16	0.00	400.16
MP-66 A	10/18/04	430.81	NA	DRY	--	--	--	--
MP-66 B	10/18/04	430.82	NA	DRY	--	--	--	--
MP-66 C	10/18/04	430.79	NA	30.08	NA	400.71	0.00	400.71
MP-67 A	10/18/04	430.29	NA	DRY	--	--	--	--
MP-67 B	10/18/04	430.31	NA	DRY	--	--	--	--
MP-67 C	10/18/04	430.19	NA	30.20	NA	399.99	0.00	399.99

**NOTES:**

NA = Not Applicable

-- = No data

\* Well contains product recovery pump

\*\* Depth to water anomaly

\*\*\* Well contains air monitoring equipment

SG = Specific gravity of hydrocarbon determined to be an average of 0.77 in Hartford for data recorded during and after 09/03.

<sup>1</sup> Piezometric surface elevation = [(A)-(C)]+S.G.[(C)-(B)]

<sup>2</sup> HB-07 is obstructed at approximately 9 ft below top of casing (TOC); HB-27 is obstructed at approximately 14 ft below TOC.

<sup>3</sup> Located on private property. Access requires permission of owner; therefore, data may not be available for all gauging events.

<sup>4</sup> Wells where multiple readings have been collected on the same day. The readings are listed in sequential order.

<sup>5</sup> MiniTROLL (automatic well gauging probe) installed in HMW-27, however, data may be from miniTROLL or manual gauging.

MP-5 through 28 installed as vacuum monitoring probes by Clayton in 7/03 and are not appropriate for determining groundwater flow.

HMW-25 through HMW-29 installed by Clayton in 12/03.

HMW-30 through 33 and RW-4, RW-4A and RW-5 installed as pilot test wells by Clayton in Spring 2004 and are not appropriate for determining groundwater flow.

Remaining HMW-series and MP-series installed by Clayton during Summer 2004.

Remaining wells installed by others.

TOC elevations surveyed to USGS datum by CMT.

All gauging data between 2/3/04 and 4/1/04 obtained as part of product recovery tests conducted at RW-2 & RW-3; these data do not present static conditions.

**TABLE 2**  
**Quarterly 2004 Groundwater Elevations/Apparent Product Thickness**  
**Wells (P and SP-series) Outside of Hartford, Illinois**

The Hartford Working Group / Hartford, Illinois  
 1190505040 -- Madison County -- ILR 000128249

WELL	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	Piezometric Surface Elevation <sup>1</sup> (ft)
P-47	01/27/04	428.20	NA	33.53	NA	394.67	0.00	394.67
	04/20/04	428.20	NA	31.90	NA	396.30	0.00	396.30
P-51	01/27/04	426.62	NA	32.25	NA	394.37	0.00	394.37
	04/20/04	426.62	NA	30.57	NA	396.05	0.00	396.05
P-76	01/28/04	433.28	NA	34.54	NA	398.74	0.00	398.74
	04/22/04	433.28	NA	30.24	NA	403.04	0.00	403.04
	07/13/04	433.28	NA	25.57	NA	407.71	0.00	407.71
	10/18/04	433.28	NA	30.88	NA	402.40	0.00	402.40
P-77	01/28/04	434.57	NA	37.61	NA	396.96	0.00	396.96
	04/22/04	434.57	NA	35.83	NA	398.74	0.00	398.74
	07/13/04	434.57	NA	33.00	NA	401.57	0.00	401.57
	10/18/04	434.57	NA	36.15	NA	398.42	0.00	398.42
P-78	01/28/04	433.29	NA	36.08	NA	397.21	0.00	397.21
	04/22/04	433.29	NA	34.24	NA	399.05	0.00	399.05
	07/13/04	433.29	NA	31.75	NA	401.54	0.00	401.54
	10/18/04	433.29	NA	34.85	NA	398.44	0.00	398.44
P-79	01/28/04	432.65	NA	35.44	NA	397.21	0.00	397.21
	04/22/04	432.65	NA	33.69	NA	398.96	0.00	398.96
	07/13/04	432.65	--	--	--	--	--	--
	10/18/04	432.65	NA	34.02	NA	398.63	0.00	398.63
P-80	01/28/04	433.04	NA	35.32	NA	397.72	0.00	397.72
	04/22/04	433.04	NA	33.59	NA	399.45	0.00	399.45
	07/13/04	433.04	NA	30.82	NA	402.22	0.00	402.22
	10/18/04	433.04	NA	34.06	NA	398.98	0.00	398.98
P-81	01/28/04	433.20	NA	34.22	NA	398.98	0.00	398.98
	04/22/04	433.20	NA	32.42	NA	400.78	0.00	400.78
	07/13/04	433.20	NA	29.58	NA	403.62	0.00	403.62
	10/18/04	433.20	30.19	30.52	403.01	402.68	0.33	402.92
P-104	01/28/04	432.67	NA	14.51	NA	418.16	0.00	418.16
	04/22/04	432.67	NA	13.68	NA	418.99	0.00	418.99
	07/13/04	432.67	NA	11.99	NA	420.68	0.00	420.68
	10/18/04	432.67	NA	17.67	NA	415.00	0.00	415.00

**TABLE 2**  
**Quarterly 2004 Groundwater Elevations/Apparent Product Thickness**  
**Wells (P and SP-series) Outside of Hartford, Illinois**

The Hartford Working Group / Hartford, Illinois  
 1190505040 -- Madison County -- ILR 000128249

WELL	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	Piezometric Surface Elevation (ft)
P-105	01/28/04	432.54	NA	31.24	NA	401.30	0.00	401.30
	04/22/04	432.54	NA	30.23	NA	402.31	0.00	402.31
	07/13/04	432.54	NA	27.65	NA	404.89	0.00	404.89
	**10/18/04	432.54	NA	30.73	NA	401.81	0.00	401.81
P-106	01/28/04	432.64	NA	35.31	NA	397.33	0.00	397.33
	04/22/04	432.64	NA	33.44	NA	399.20	0.00	399.20
	07/13/04	432.64	NA	30.55	NA	402.09	0.00	402.09
	10/18/04	432.64	NA	33.95	NA	398.69	0.00	398.69
P-107	01/28/04	431.83	NA	29.12	NA	402.71	0.00	402.71
	04/22/04	431.83	NA	27.82	NA	404.01	0.00	404.01
	07/13/04	431.83	NA	24.47	NA	407.36	0.00	407.36
	10/18/04	431.83	NA	29.71	NA	402.12	0.00	402.12
P-129	01/28/04	433.23	NA	34.32	NA	398.91	0.00	398.91
	07/13/04	433.23	--	--	--	--	--	--
	10/18/04	433.23	--	--	--	--	--	--
P-130	01/28/04	431.67	--	--	--	--	--	--
	07/13/04	431.67	NA	11.3	NA	420.37	0.00	420.37
	10/18/04	431.67	--	--	--	--	--	--
P-131	01/28/04	432.54	NA	11.38	NA	421.16	0.00	421.16
	04/22/04	432.54	NA	12.69	NA	419.85	0.00	419.85
	07/13/04	432.54	NA	10.01	NA	422.53	0.00	422.53
	10/18/04	432.54	NA	18.57	NA	413.97	0.00	413.97
P-132	01/28/04	432.08	NA	28.53	NA	403.55	0.00	403.55
	04/22/04	432.08	NA	27.57	NA	404.51	0.00	404.51
	07/13/04	432.08	NA	23.95	NA	408.13	0.00	408.13
	10/18/04	432.08	NA	29.66	NA	402.42	0.00	402.42
P-133	01/28/04	430.94	NA	13.57	NA	417.37	0.00	417.37
	04/22/04	430.94	NA	18.18	NA	412.76	0.00	412.76
	07/13/04	430.94	NA	13.95	NA	416.99	0.00	416.99
	10/18/04	430.94	NA	21.88	NA	409.06	0.00	409.06
P-134	01/28/04	432.46	NA	11.86	NA	420.60	0.00	420.60
	04/22/04	432.46	NA	12.63	NA	419.83	0.00	419.83
	07/13/04	432.46	NA	10.62	NA	421.84	0.00	421.84
	10/18/04	432.46	NA	17.55	NA	414.91	0.00	414.91

**TABLE 2**  
**Quarterly 2004 Groundwater Elevations/Apparent Product Thickness**  
**Wells (P and SP-series) Outside of Hartford, Illinois**

The Hartford Working Group / Hartford, Illinois  
 1190505040 -- Madison County -- ILR 000128249

WELL	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	Piezometric Surface Elevation (ft)
SP-1	01/28/04	429.00	--	--	--	--	--	--
	04/22/04	429.00	NA	10.53	NA	418.47	0.00	418.47
	07/13/04	429.00	NA	7.41	NA	421.59	0.00	421.59
	10/18/04	429.00	NA	13.80	NA	415.20	0.00	415.20
SP-2B	01/28/04	429.10	NA	26.66	NA	402.44	0.00	402.44
	04/22/04	429.10	NA	25.76	NA	403.34	0.00	403.34
	07/13/04	429.10	NA	21.58	NA	407.52	0.00	407.52
	10/18/04	429.10	NA	27.52	NA	401.58	0.00	401.58
SP-3	01/28/04	--	NA	9.91	NA	--	0.00	--
	04/22/04	--	NA	12.87	NA	--	0.00	--
	07/13/04	--	NA	10.23	NA	--	0.00	--
	10/18/04	--	NA	15.73	NA	--	0.00	--
SP-5	01/28/04	431.22	NA	10.01	NA	421.21	0.00	421.21
	04/22/04	431.22	NA	12.66	NA	418.56	0.00	418.56
	07/13/04	431.22	NA	8.59	NA	422.63	0.00	422.63
	10/18/04	431.22	NA	17.40	NA	413.82	0.00	413.82
SP-6	01/28/04	433.03	NA	10.56	NA	422.47	0.00	422.47
	04/22/04	433.03	NA	12.62	NA	420.41	0.00	420.41
	07/13/04	433.03	NA	10.54	NA	422.49	0.00	422.49
	10/18/04	433.03	NA	16.84	NA	416.19	0.00	416.19
SP-7	01/28/04	428.99	NA	8.47	NA	420.52	0.00	420.52
	04/22/04	428.99	NA	10.16	NA	418.83	0.00	418.83
	07/13/04	428.99	NA	7.00	NA	421.99	0.00	421.99
	10/18/04	428.99	NA	14.53	NA	414.46	0.00	414.46
SP-8	01/28/04	429.03	NA	8.28	NA	420.75	0.00	420.75
	04/22/04	429.03	NA	9.52	NA	419.51	0.00	419.51
	07/13/04	429.03	NA	6.8	NA	422.23	0.00	422.23
	10/18/04	429.03	NA	13.97	NA	415.06	0.00	415.06
SP-9	01/28/04	432.62	NA	10.62	NA	422.00	0.00	422.00
	04/22/04	432.62	NA	11.88	NA	420.74	0.00	420.74
	07/13/04	432.62	NA	9.95	NA	422.67	0.00	422.67
	10/18/04	432.62	NA	16.74	NA	415.88	0.00	415.88

**TABLE 2**  
**Quarterly 2004 Groundwater Elevations/Apparent Product Thickness**  
**Wells (P and SP-series) Outside of Hartford, Illinois**

The Hartford Working Group / Hartford, Illinois  
 1190505040 -- Madison County -- ILR 000128249

WELL	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	Piezometric Surface Elevation (ft)
SP-10	01/28/04	432.59	NA	10.75	NA	421.84	0.00	421.84
	04/22/04	432.59	NA	11.56	NA	421.03	0.00	421.03
	07/13/04	432.59	NA	9.40	NA	423.19	0.00	423.19
	**10/18/04	432.59	NA	16.80	NA	415.79	0.00	415.79
SP-11	01/28/04	432.41	NA	10.27	NA	422.14	0.00	422.14
	04/22/04	432.41	NA	12.58	NA	419.83	0.00	419.83
	07/13/04	432.41	NA	10.27	NA	422.14	0.00	422.14
	10/18/04	432.41	NA	15.22	NA	417.19	0.00	417.19
SP-12	01/28/04	432.35	NA	29.61	NA	402.74	0.00	402.74
	04/22/04	432.35	NA	28.68	NA	403.67	0.00	403.67
	07/13/04	432.35	NA	24.76	NA	407.59	0.00	407.59
	10/18/04	432.35	NA	30.52	NA	401.83	0.00	401.83
SP-13	01/28/04	432.48	NA	33.82	NA	398.66	0.00	398.66
	04/22/04	432.48	NA	33.16	NA	399.32	0.00	399.32
	07/13/04	432.48	NA	30.13	NA	402.35	0.00	402.35
	10/18/04	432.48	NA	33.97	NA	398.51	0.00	398.51
SP-14	01/28/04	428.92	NA	28.51	NA	400.41	0.00	400.41
	04/22/04	428.92	NA	27.02	NA	401.90	0.00	401.90
	07/13/04	428.92	NA	--	--	--	--	--
	10/18/04	428.92	NA	28.45	NA	400.47	0.00	400.47
SP-15	01/28/04	428.69	NA	9.18	NA	419.51	0.00	419.51
	04/22/04	428.69	NA	10.87	NA	417.82	0.00	417.82
	07/13/04	428.69	NA	7.01	NA	421.68	0.00	421.68
	10/18/04	428.69	NA	15.50	NA	413.19	0.00	413.19
SP-16	01/28/04	429.38	NA	8.91	NA	420.47	0.00	420.47
	04/22/04	429.38	NA	11.24	NA	418.14	0.00	418.14
	07/13/04	429.38	NA	7.50	NA	421.88	0.00	421.88
	10/18/04	429.38	NA	15.86	NA	413.52	0.00	413.52
SP-17	01/28/04	428.19	NA	9.06	NA	419.13	0.00	419.13
	04/22/04	428.19	NA	9.72	NA	418.47	0.00	418.47
	07/13/04	428.19	NA	6.43	NA	421.76	0.00	421.76
	10/18/04	428.19	NA	15.14	NA	413.05	0.00	413.05

**TABLE 2**  
**Quarterly 2004 Groundwater Elevations/Apparent Product Thickness**  
**Wells (P and SP-series) Outside of Hartford, Illinois**

The Hartford Working Group / Hartford, Illinois  
 1190505040 -- Madison County -- ILR 000128249

WELL	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	Piezometric Surface Elevation (ft)
SP-18	01/28/04	431.07	NA	31.43	NA	399.64	0.00	399.64
	04/22/04	431.07	NA	30.27	NA	400.80	0.00	400.80
	07/13/04	431.07	NA	26.53	NA	404.54	0.00	404.54
	10/18/04	431.07	NA	31.16	NA	399.91	0.00	399.91
SP-19	01/28/04	430.89	NA	13.95	NA	416.94	0.00	416.94
	04/22/04	430.89	NA	15.8	NA	415.09	0.00	415.09
	07/13/04	430.89	NA	10.7	NA	420.19	0.00	420.19
	10/18/04	430.89	NA	20.4	NA	410.49	0.00	410.49
SP-20	01/28/04	431.10	NA	12.42	NA	418.68	0.00	418.68
	04/22/04	431.10	NA	15.32	NA	415.78	0.00	415.78
	07/13/04	431.10	NA	9.79	NA	421.31	0.00	421.31
	10/18/04	431.10	NA	19.71	NA	411.39	0.00	411.39
SP-21	01/28/04	431.65	NA	14.38	NA	417.27	0.00	417.27
	04/22/04	431.65	NA	17.22	NA	414.43	0.00	414.43
	07/13/04	431.65	NA	10.86	NA	420.79	0.00	420.79
	10/18/04	431.65	NA	21.79	NA	409.86	0.00	409.86
SP-22	01/28/04	430.36	NA	9.98	NA	420.38	0.00	420.38
	04/22/04	430.36	NA	12.38	NA	417.98	0.00	417.98
	07/13/04	430.36	NA	8.31	NA	422.05	0.00	422.05
	10/18/04	430.36	NA	16.84	NA	413.52	0.00	413.52
SP-23	01/28/04	430.67	NA	10.19	NA	420.48	0.00	420.48
	04/22/04	430.67	NA	13.24	NA	417.43	0.00	417.43
	07/13/04	430.67	NA	8.68	NA	421.99	0.00	421.99
	10/18/04	430.67	NA	18.02	NA	412.65	0.00	412.65
SP-24	01/28/04	428.86	NA	8.29	NA	420.57	0.00	420.57
	04/22/04	428.86	NA	9.98	NA	418.88	0.00	418.88
	07/13/04	428.86	NA	23.03	NA	405.83	0.00	405.83
	10/18/04	428.86	NA	14.41	NA	414.45	0.00	414.45
SP-25	01/28/04	428.61	NA	8.13	NA	420.48	0.00	420.48
	04/22/04	428.61	NA	10.14	NA	418.47	0.00	418.47
	07/13/04	428.61	NA	6.62	NA	421.99	0.00	421.99
	10/18/04	428.61	NA	14.37	NA	414.24	0.00	414.24

**TABLE 2**  
**Quarterly 2004 Groundwater Elevations/Apparent Product Thickness**  
**Wells (P and SP-series) Outside of Hartford, Illinois**

The Hartford Working Group / Hartford, Illinois  
 1190505040 -- Madison County -- ILR 000128249

WELL	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	Piezometric Surface Elevation (ft)
SP-26	01/28/04	429.84	NA	9.41	NA	420.43	0.00	420.43
	04/22/04	429.84	NA	11.13	NA	418.71	0.00	418.71
	07/13/04	429.84	NA	7.89	NA	421.95	0.00	421.95
	10/18/04	429.84	NA	15.50	NA	414.34	0.00	414.34
SP-27	01/28/04	431.90	NA	11.28	NA	420.62	0.00	420.62
	04/22/04	431.90	NA	13.50	NA	418.40	0.00	418.40
	07/13/04	431.90	NA	10.38	NA	421.52	0.00	421.52
	10/18/04	431.90	NA	17.65	NA	414.25	0.00	414.25
SP-28	01/28/04	432.19	NA	10.63	NA	421.56	0.00	421.56
	04/22/04	432.19	NA	13.65	NA	418.54	0.00	418.54
	**07/13/04	432.19	NA	11.31	NA	420.88	0.00	420.88
	10/18/04	432.19	NA	16.63	NA	415.56	0.00	415.56
SP-29	01/28/04	431.78	NA	11.16	NA	420.62	0.00	420.62
	04/22/04	431.78	NA	12.44	NA	419.34	0.00	419.34
	07/13/04	431.78	NA	9.58	NA	422.20	0.00	422.20
	10/18/04	431.78	NA	16.88	NA	414.90	0.00	414.90
SP-30	01/28/04	431.83	12.05	12.06	419.78	419.77	0.01	419.78
	04/22/04	431.83	NA	14.34	NA	417.49	0.00	417.49
	07/13/04	431.83	10.28	10.32	421.55	421.51	0.04	421.54
	10/18/04	431.83	NA	19.15	NA	412.68	0.00	412.68
SP-31	01/28/04	429.77	NA	10.19	NA	419.58	0.00	419.58
	04/22/04	429.77	NA	11.22	NA	418.55	0.00	418.55
	07/13/04	429.77	NA	7.85	NA	421.92	0.00	421.92
	10/18/04	429.77	NA	16.13	NA	413.64	0.00	413.64
SP-32	01/28/04	430.42	NA	10.84	NA	419.58	0.00	419.58
	04/22/04	430.42	NA	12.43	NA	417.99	0.00	417.99
	07/13/04	430.42	NA	8.67	NA	421.75	0.00	421.75
	10/18/04	430.42	NA	17.18	NA	413.24	0.00	413.24
SP-33	01/28/04	430.95	NA	10.52	NA	420.43	0.00	420.43
	04/22/04	430.95	NA	12.85	NA	418.10	0.00	418.10
	07/13/04	430.95	NA	9.16	NA	421.79	0.00	421.79
	10/18/04	430.95	NA	17.43	NA	413.52	0.00	413.52

**TABLE 2**  
**Quarterly 2004 Groundwater Elevations/Apparent Product Thickness**  
**Wells (P and SP-series) Outside of Hartford, Illinois**

The Hartford Working Group / Hartford, Illinois  
 1190505040 -- Madison County -- ILR 000128249

WELL	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	Piezometric Surface Elevation <sup>1</sup> (ft)
SP-34	01/28/04	430.12	NA	10.95	NA	419.17	0.00	419.17
	04/22/04	430.12	NA	11.46	NA	418.66	0.00	418.66
	07/13/04	430.12	NA	8.30	NA	421.82	0.00	421.82
	10/18/04	430.12	NA	16.93	NA	413.19	0.00	413.19
SP-35	01/28/04	431.13	NA	10.70	NA	420.43	0.00	420.43
	04/22/04	431.13	NA	12.42	NA	418.71	0.00	418.71
	07/13/04	431.13	NA	9.16	NA	421.97	0.00	421.97
	10/18/04	431.13	NA	16.80	NA	414.33	0.00	414.33
SP-36	01/28/04	429.41	NA	32.50	NA	396.91	0.00	396.91
	04/22/04	429.41	NA	31.02	NA	398.39	0.00	398.39
	07/13/04	429.41	NA	28.19	NA	401.22	0.00	401.22
	10/18/04	429.41	NA	31.00	NA	398.41	0.00	398.41
SP-37	01/28/04	429.58	NA	24.12	NA	405.46	0.00	405.46
	04/22/04	429.58	NA	25.61	NA	403.97	0.00	403.97
	07/13/04	429.58	NA	19.26	NA	410.32	0.00	410.32
	10/18/04	429.58	NA	28.02	NA	401.56	0.00	401.56
SP-38	01/28/04	430.84	NA	19.38	NA	411.46	0.00	411.46
	04/22/04	430.84	NA	19.96	NA	410.88	0.00	410.88
	07/13/04	430.84	NA	15.47	NA	415.37	0.00	415.37
	10/18/04	430.84	NA	DRY	NA	430.84	0.00	430.84
SP-39	01/28/04	431.92	NA	11.88	NA	420.04	0.00	420.04
	04/22/04	431.92	NA	16.19	NA	415.73	0.00	415.73
	07/13/04	431.92	NA	9.64	NA	422.28	0.00	422.28
	10/18/04	431.92	NA	21.00	NA	410.92	0.00	410.92
SP-40	01/28/04	431.78	NA	28.60	NA	403.18	0.00	403.18
	04/22/04	431.78	NA	28.80	NA	402.98	0.00	402.98
	07/13/04	431.78	NA	23.53	NA	408.25	0.00	408.25
	10/18/04	431.78	NA	31.64	NA	400.14	0.00	400.14
SP-41	01/28/04	431.45	NA	35.33	NA	396.12	0.00	396.12
	04/22/04	431.45	NA	33.97	NA	397.48	0.00	397.48
	07/13/04	431.45	NA	30.60	NA	400.85	0.00	400.85
	10/18/04	431.45	NA	34.03	NA	397.42	0.00	397.42

**TABLE 2**  
**Quarterly 2004 Groundwater Elevations/Apparent Product Thickness**  
**Wells (P and SP-series) Outside of Hartford, Illinois**

The Hartford Working Group / Hartford, Illinois  
 1190505040 -- Madison County -- ILR 000128249

WELL	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	Piezometric Surface Elevation (ft)
SP-42	01/28/04	431.71	NA	35.42	NA	396.29	0.00	396.29
	04/22/04	431.71	NA	33.87	NA	397.84	0.00	397.84
	07/13/04	431.71	NA	30.47	NA	401.24	0.00	401.24
	10/18/04	431.71	NA	34.15	NA	397.56	0.00	397.56
SP-43	01/28/04	431.74	NA	29.61	NA	402.13	0.00	402.13
	04/22/04	431.74	NA	27.72	NA	404.02	0.00	404.02
	07/13/04	431.74	NA	21.00	NA	410.74	0.00	410.74
	10/18/04	431.74	NA	30.86	NA	400.88	0.00	400.88
SP-44	01/28/04	431.83	NA	14.11	NA	417.72	0.00	417.72
	04/22/04	431.83	NA	17.20	NA	414.63	0.00	414.63
	**07/13/04	431.83	10.38	10.61	421.45	421.22	0.23	421.39
	10/18/04	431.83	NA	DRY	NA	431.83	0.00	431.83

**NOTES:**

NA = Not Applicable

-- = No data

\*\* Depth to water anomaly

SG = Specific gravity of hydrocarbon assumed to be 0.74 by others.

<sup>1</sup> Piezometric surface elevation = [(A)-(C)]+S.G.[(C)-(B)]

<sup>2</sup> Followup checking found that this reading was in error. There was no FPH detected in this well.

Well SP-4 no longer exists.

TOC elevations (except for SP-42, SP-43, & SP-44) have been rotated and adjusted to match USGS datum (datum used to survey Village wells). This rotation and adjustment of original survey data (obtained in 7/01 by CMT, Inc.) was completed in 1/04 by CMT. TOC elevations for SP-42, SP-43, and SP-44 were surveyed to USGS datum in 12/03 by CMT.

**TABLE 3**  
**Quarterly 2004 Groundwater Elevations/Apparent Product Thickness**  
**Wells (RB-series) Outside of Hartford, Illinois**

The Hartford Working Group / Hartford, Illinois  
 1190505040 -- Madison County -- ILR 000128249

WELL	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	Piezometric Surface Elevation (ft)
RB-1	01/27/04	430.22	NA	31.13	NA	399.09	0	399.09
	04/20/04	430.22	NA	29.29	NA	400.93	0	400.93
	07/13/04	430.22	NA	27.00	NA	403.22	0	403.22
	10/19/04	430.22	NA	30.54	NA	399.68	0	399.68
TH2-88 @P7 Well	01/27/04	--	NA	31.04	NA	--	--	--
	04/20/04	--	NA	29.84	NA	--	--	--
	07/14/04	--	NA	28.28	NA	--	--	--
	10/20/04	--	NA	30.66	NA	--	0	--
RB-08P	01/28/04	433.43	23.89	23.90	409.54	409.53	0.01	409.54
	04/20/04	433.43	23.64	23.65	409.79	409.78	0.01	409.79
	07/14/04	433.43	NA	22.41	NA	411.02	0	411.02
	10/19/04	433.43	31.93	32.48	401.5	400.95	0.55	401.38
RB-08 Recovery Well	01/28/04	--	32.51	33.32	--	--	0.81	--
	04/20/04	--	30.84	31.16	--	--	0.32	--
	07/14/04	--	28.89	29.38	--	--	0.49	--
	10/19/04	--	NA	24.46	--	--	0	--
RB-10*	01/28/04	430.03	31.02	31.25	399.01	398.78	0.23	398.96
	04/21/04	430.03	29.97	30.24	400.06	399.79	0.27	400.00
	07/14/04	430.03	--	--	--	--	--	--
	10/19/04	430.03	30.09	32.96	399.94	397.07	2.87	399.31
RB-13	01/27/04	--	NA	30.52	NA	--	0	--
	04/21/04	--	NA	29.20	NA	--	0	--
	07/14/04	--	NA	27.13	NA	--	0	--
	10/19/04	--	NA	29.96	NA	--	0	--
RB-22	01/28/04	431.01	NA	31.02	NA	399.99	0	399.99
	04/21/04	431.01	NA	29.86	NA	401.15	0	401.15
	07/14/04	431.01	NA	27.57	NA	403.44	0	403.44
	10/20/04	431.01	NA	30.61	NA	400.40	0	400.40
RB-25	01/27/04	432.11	NA	31.84	NA	400.27	0	400.27
	04/20/04	432.11	NA	31.95	NA	400.16	0	400.16
	07/14/03	432.11	NA	30.15	NA	401.96	0	401.96
	10/20/04	432.11	NA	33.15	NA	398.96	0	398.96
RB-26	01/27/04	430.03	NA	31.41	NA	398.62	0	398.62
	04/20/04	430.03	NA	29.73	NA	400.30	0	400.30
	07/14/04	430.03	NA	28.20	NA	401.83	0	401.83
	10/20/04	430.03	NA	30.96	NA	399.07	0	399.07

**TABLE 3**  
**Quarterly 2004 Groundwater Elevations/Apparent Product Thickness**  
**Wells (RB-series) Outside of Hartford, Illinois**

The Hartford Working Group / Hartford, Illinois  
 1190505040 -- Madison County -- ILR 000128249

WELL	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	Piezometric Surface Elevation (ft)
RB-29	01/28/04	431.89	13.70	13.88	418.19	418.01	0.18	418.15
	04/20/04	431.89	13.61	13.74	418.28	418.15	0.13	418.25
	07/14/04	431.89	12.43	12.60	419.46	419.29	0.17	419.42
	10/18/04	431.89	13.96	14.07	417.93	417.82	0.11	417.91
RB-30	01/28/04	431.89	NA	32.30	NA	399.59	0	399.59
	04/20/04	431.89	NA	31.26	NA	400.63	0	400.63
	07/14/04	431.89	NA	29.90	NA	401.99	0	401.99
	10/18/04	431.89	NA	31.64	NA	400.25	0	400.25
RB-35	01/28/04	429.85	29.10	29.54	400.75	400.31	0.44	400.65
	04/21/04	429.85	27.45	28.80	402.4	401.05	1.35	402.10
	07/14/04	429.85	—	—	—	—	—	—
	10/20/04	429.85	28.56	30.48	401.29	399.37	1.92	400.87
RB-36	01/28/04	429.16	NA	23.32	NA	405.84	0	405.84
	04/20/04	429.16	NA	21.83	NA	407.33	0	407.33
	07/13/04	429.16	NA	20.75	NA	408.41	0	408.41
	10/19/04	429.16	NA	22.22	NA	406.94	0	406.94
RB-37*	01/28/04	428.38	29.32	32.35	399.06	396.03	3.03	398.39
	04/20/04	428.38	27.57	32.11	400.81	396.27	4.54	399.81
	07/13/04	428.38	—	—	—	—	—	—
	10/19/04	428.38	28.45	32.84	399.93	395.54	4.39	398.96
RB-38	01/27/04	433.69	NA	35.02	NA	398.67	0	398.67
	04/20/04	433.69	NA	33.94	NA	399.75	0	399.75
	**7/14/04	433.69	NA	30.70	NA	402.99	0	402.99
	10/19/04	433.69	NA	34.49	NA	399.20	0	399.20
RB-39	01/27/04	431.48	NA	26.90	NA	404.58	0	404.58
	04/20/04	431.48	NA	25.83	NA	405.65	0	405.65
	07/14/04	431.48	NA	23.40	NA	408.08	0	408.08
	10/19/04	431.48	NA	28.93	NA	402.55	0	402.55
RB-40	01/27/04	433.50	NA	34.12	NA	399.38	0	399.38
	04/20/04	433.50	NA	33.51	NA	399.99	0	399.99
	07/13/04	433.50	NA	32.60	NA	400.90	0	400.90
	10/19/04	433.50	NA	33.93	NA	399.57	0	399.57
RB-41	01/27/04	433.24	NA	33.72	NA	399.52	0	399.52
	04/20/04	433.24	NA	33.34	NA	399.90	0	399.90
	07/13/04	433.24	NA	32.75	NA	400.49	0	400.49
	10/19/04	433.24	NA	33.79	NA	399.45	0	399.45

**TABLE 3**  
**Quarterly 2004 Groundwater Elevations/Apparent Product Thickness**  
**Wells (RB-series) Outside of Hartford, Illinois**

The Hartford Working Group / Hartford, Illinois  
 1190505040 -- Madison County -- ILR 000128249

WELL	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	Piezometric Surface Elevation <sup>1</sup> (ft)
RB-42	01/27/04	428.45	NA	28.33	NA	400.12	0	400.12
	04/20/04	428.45	NA	28.27	NA	400.18	0	400.18
	07/13/04	428.45	NA	28.00	NA	400.45	0	400.45
	10/18/04	428.45	NA	28.51	NA	399.94	0	399.94
RB-43	01/27/04	427.95	NA	25.54	NA	402.41	0	402.41
	04/20/04	427.95	NA	25.85	NA	402.10	0	402.10
	07/13/04	427.95	NA	25.00	NA	402.95	0	402.95
	10/18/04	427.95	NA	25.73	NA	402.22	0	402.22
RB-44	01/27/04	432.95	NA	31.93	NA	401.02	0	401.02
	04/20/04	432.95	NA	30.95	NA	402.00	0	402.00
	07/13/04	432.95	NA	29.60	NA	403.35	0	403.35
	10/18/04	432.95	NA	30.97	NA	401.98	0	401.98
RB-45	01/27/04	431.92	NA	30.41	NA	401.51	0	401.51
	04/20/04	431.92	NA	30.04	NA	401.88	0	401.88
	07/13/04	431.92	NA	28.55	NA	403.37	0	403.37
	10/18/04	431.92	NA	30.14	NA	401.78	0	401.78
RB-46	01/28/04	430.62	NA	30.43	NA	400.19	0	400.19
	04/21/04	430.62	NA	29.40	NA	401.22	0	401.22
	07/14/04	430.62	NA	27.29	NA	403.33	0	403.33
	10/20/04	430.62	NA	30.02	NA	400.60	0	400.60
RB-47	01/28/04	431.12	NA	31.18	NA	399.94	0	399.94
	04/21/04	431.12	NA	30.13	NA	400.99	0	400.99
	07/14/04	431.12	NA	27.91	NA	403.21	0	403.21
	10/20/04	431.12	NA	30.84	NA	400.28	0	400.28
RB-48*	01/28/04	431.26	29.49	32.56	401.77	398.70	3.07	401.09
	04/21/04	431.26	28.54	30.65	402.72	400.61	2.11	402.26
	07/14/04	431.26	--	--	--	--	--	--
	10/20/04	431.26	28.76	32.39	402.5	398.87	3.63	401.70
RB-49	01/28/04	429.31	NA	2.80	NA	426.51	0	426.51
	04/21/04	429.31	NA	3.21	NA	426.10	0	426.10
	07/14/04	429.31	NA	2.70	NA	426.61	0	426.61
	10/20/04	429.31	NA	3.59	NA	425.72	0	425.72
RB-50	01/28/04	431.50	NA	4.80	NA	426.70	0	426.70
	04/21/04	431.50	NA	6.08	NA	425.42	0	425.42
	07/14/04	431.50	NA	5.22	NA	426.28	0	426.28
	10/20/04	431.50	NA	7.61	NA	423.89	0	423.89

**TABLE 3**  
**Quarterly 2004 Groundwater Elevations/Apparent Product Thickness**  
**Wells (RB-series) Outside of Hartford, Illinois**

The Hartford Working Group / Hartford, Illinois  
 1190505040 -- Madison County -- ILR 000128249

WELL	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	Piezometric Surface Elevation <sup>1</sup> (ft)
RB-51	01/28/04	431.58	NA	31.01	NA	400.57	0	400.57
	04/21/04	431.58	NA	29.24	NA	402.34	0	402.34
	07/14/04	431.58	NA	26.26	NA	405.32	0	405.32
	10/20/04	431.58	NA	30.10	NA	401.48	0	401.48
RB-52*	01/28/04	432.02	NA	32.96	NA	399.06	0	399.06
	04/21/04	432.02	NA	31.26	NA	400.76	0	400.76
	07/14/04	432.02	--	--	--	--	--	--
	10/19/04	432.02	32.29	32.51	399.73	399.51	0.22	399.68
RB-53*	01/28/04	433.84	34.55	34.56	399.29	399.28	0.01	399.29
	04/20/04	433.84	NA	32.37	NA	401.47	0	401.47
	07/14/04	433.84	--	--	--	--	--	--
	10/19/04	433.84	32.87	35.53	400.97	398.31	2.66	400.38
RB-54	01/27/04	431.88	NA	20.11	NA	411.77	0	411.77
	04/20/04	431.88	NA	21.58	NA	410.30	0	410.30
	07/14/04	431.88	NA	17.15	NA	414.73	0	414.73
	10/19/04	431.88	NA	21.94	NA	409.94	0	409.94
RB-55*	01/28/04	434.21	33.39	33.40	400.82	400.81	0.01	400.82
	04/21/04	434.21	29.97	37.42	404.24	396.79	7.45	402.60
	07/14/04	434.21	--	--	--	--	--	--
	10/19/04	434.21	31.46	37.59	402.75	396.62	6.13	401.40
RB-56*	01/28/04	431.91	32.16	35.64	399.75	396.27	3.48	398.98
	04/21/04	431.91	31.35	33.40	400.56	398.51	2.05	400.11
	07/14/04	431.91	--	--	--	--	--	--
	10/19/04	431.91	32.39	35.67	399.52	396.24	3.28	398.80
GB-1	01/27/04	431.55	NA	29.07	NA	402.48	0	402.48
	04/20/04	431.55	NA	29.41	NA	402.14	0	402.14
	07/13/04	431.55	NA	28.25	NA	403.30	0	403.30
	10/18/04	431.55	NA	29.38	NA	402.17	0	402.17
GB-6	01/27/04	430.53	NA	29.44	NA	401.09	0	401.09
	04/20/04	430.53	NA	29.62	NA	400.91	0	400.91
	07/13/04	430.53	NA	29.10	NA	401.43	0	401.43
	10/18/04	430.53	NA	29.71	NA	400.82	0	400.82
LP-4	01/27/04	432.53	NA	31.64	NA	400.89	0	400.89
	04/20/04	432.53	NA	31.36	NA	401.17	0	401.17
	07/13/04	432.53	NA	30.10	NA	402.43	0	402.43
	10/19/04	432.53	NA	31.64	NA	400.89	0	400.89

**TABLE 3**  
**Quarterly 2004 Groundwater Elevations/Apparent Product Thickness**  
*Wells (RB-series) Outside of Hartford, Illinois*

The Hartford Working Group / Hartford, Illinois  
 1190505040 -- Madison County -- ILR 000128249

WELL	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	Piezometric Surface Elevation <sup>1</sup> (ft)
T-1*	01/28/04	--	29.47	32.50	--	--	3.03	--
	04/21/04	--	28.55	30.61	--	--	2.06	--
	07/13/04	--	--	--	--	--	--	--
	10/20/04	--	28.94	31.84	--	--	2.9	--
MP-1S	04/21/04	--	NA	24.46	NA	--	0	--
	07/14/04	--	27.60	27.90	--	--	0.3	--
	10/19/04	--	NA	24.34	--	--	0	--
MP-1D	04/21/04	--	30.16	30.20	--	--	0.04	--
	07/14/04	--	NA	23.00	--	--	0	--
	10/19/04	--	NA	31.44	--	--	0	--
MP-2S	04/21/04	--	NA	29.67	NA	--	0	--
	07/14/04	--	NA	26.81	NA	--	0	--
	10/19/04	--	NA	27.01	--	--	0	--
MP-2D	04/21/04	--	NA	27.00	NA	--	0	--
	07/14/04	--	26.74	26.99	--	--	0.25	--
	10/19/04	--	30.02	32.03	--	--	2.01	--
MP-3S	04/21/04	--	NA	29.26	NA	--	0	--
	07/14/04	--	NA	26.78	NA	--	0	--
	10/19/04	--	NA	19.98	NA	--	0	--
MP-3D	04/21/04	--	NA	18.66	NA	--	0	--
	07/14/04	--	NA	16.85	NA	--	0	--
	10/19/04	--	NA	30.52	NA	--	0	--
MP-4S	04/21/04	--	--	--	--	--	--	--
	07/14/04	--	26.65	29.36	--	--	2.71	--
	10/19/04	--	NA	DRY	--	--	--	--
MP-4D	04/21/04	--	--	--	--	--	--	--
	07/14/04	--	NA	25.60	NA	--	0	--
	10/19/04	--	30.63	32.64	--	--	2.01	--
SVE-1S	04/21/04	--	--	--	--	--	--	--
	07/14/04	--	--	--	--	--	--	--
SVE-1D*	10/20/04	--	NA	26.32	--	--	0	--
	04/20/04	--	29.65	29.71	--	--	0.06	--
	07/14/04	--	--	--	--	--	--	--
	10/20/04	--	NA	31.06	--	--	0	--

**TABLE 3**  
**Quarterly 2004 Groundwater Elevations/Apparent Product Thickness**  
**Wells (RB-series) Outside of Hartford, Illinois**

The Hartford Working Group / Hartford, Illinois  
 1190505040 -- Madison County -- ILR 000128249

WELL	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	Piezometric Surface Elevation <sup>1</sup> (ft)
Product	04/21/04	--	13.79	13.80	--	--	0.01	--
Pipeline	07/14/04	--	NA	13.93	--	--	0	--
Sump	10/20/04	--	NA	13.95	--	--	0	--
MW-1	10/22/04	--	NA	20.93	--	--	0	--
MW-2	10/22/04	--	NA	20.55	--	--	0	--
MW-3	10/22/04	--	NA	22.31	--	--	0	--
MW-4	10/22/04	--	NA	22.86	--	--	0	--

**NOTES:**

NA = Not Applicable

-- = No data

<sup>1</sup> Piezometric surface elevation = [(A)-(C)]+S.G.[(C)-(B)]

\* Well contains product recovery pump.

\*\* = Depth to water anomaly

SG = Specific gravity of hydrocarbon determined to be an average of 0.78 on the Premcor facility for data recorded during and after 9/03.

MP- and SVE-series installed by Clayton in 6/03. MP-series installed as vacuum monitoring probes. SVE-series installed as soil vapor extraction wells. MP- and SVE-series not appropriate for determining groundwater flow.

Remaining wells installed by others. MW-series are located at the Premcor River Dock.

MP- and SVE-series, and RB-13, T-1, TH2-88@P7 well and RB-08 (recovery well) well TOC elevations to be determined by Illinois-licensed surveyor. TOC elevations rotated and adjusted to match USGS datum (datum used to survey Village wells). This rotation and adjustment of original survey data (obtained in 6/02 by CMT, Inc.) was completed in 1/04 by CMT.

**TABLE 4**  
**Compound/Analyte List for Water Samples**  
**VOCs**  
*Village of Hartford*

The Hartford Working Group / Hartford, Illinois  
 1190505040 -- Madison County -- ILR 000128249

PARAMETER	PREPARATION METHOD		ANALYTICAL METHOD		COMPOUND	METHOD DETECTION LIMIT * ( $\mu\text{g/L}$ )	PRACTICAL QUANTITATION LIMIT * ( $\mu\text{g/L}$ )	ACCEPTABLE DETECTION LIMIT ** ( $\mu\text{g/L}$ )
	Source	Method No.	Source	Method No.				
VOCS								
SW-846	5030	SW-846	8260	Benzene		0.5	2	5
SW-846	5030	SW-846	8260	Carbon disulfide		1	5	700
SW-846	5030	SW-846	8260	Chlorobenzene		1	5	100
SW-846	5030	SW-846	8260	Chloroform		1	5	0.2
SW-846	5030	SW-846	8260	1,2-Dibromoethane or Ethylene dibromide (EDB)		1	5	0.05
SW-846	5030	SW-846	8260	1,2-Dichlorobenzene		1	5	600
SW-846	5030	SW-846	8260	1,3-Dichlorobenzene		1	5	NA
SW-846	5030	SW-846	8260	1,4-Dichlorobenzene		1	5	75
SW-846	5030	SW-846	8260	1,1-Dichloroethane		1	5	700
SW-846	5030	SW-846	8260	1,2-Dichloroethane		1	5	5
SW-846	5030	SW-846	8260	Ethylbenzene		1	5	700
SW-846	5030	SW-846	8260	Methyl ethyl ketone (MEK) or 2-Butanone		5	50	NA
SW-846	5030	SW-846	8260	Methyl tertiary butyl ether (MTBE)		0.5	2	70
SW-846	5030	SW-846	8260	Styrene		1	5	100
SW-846	5030	SW-846	8260	1,1,1-Trichloroethane		1	5	200
SW-846	5030	SW-846	8260	Tetrachloroethene		1	5	5
SW-846	5030	SW-846	8260	Toluene		1	5	1,000
SW-846	5030	SW-846	8260	Trichloroethene		1	5	5
SW-846	5030	SW-846	8260	o, m, p-Xylenes (total)		1	5	10,000
SW-846	3510	SW-846	8015	1,4-Dioxane		250	500	NA

**NOTES:**

$\mu\text{g/L}$  = Micrograms per liter

\* = Method detection limit and practical quantitation limit as identified by Teklab, Inc. (Ottensmeier, 2004).

\*\* = Acceptable detection limit is the IPCB TACO Tier 1 Groundwater Remediation Objective for Class I Groundwater.

NA = Not available



**TABLE 4**  
**Compound/Analyte List for Water Samples**  
**SVOCs**  
*Village of Hartford*

The Hartford Working Group / Hartford, Illinois  
 1190505040 -- Madison County -- ILR 000128249

PARAMETER	PREPARATION METHOD		ANALYTICAL METHOD		COMPOUND	METHOD DETECTION LIMIT * (mg/L)	PRACTICAL QUANTITATION LIMIT * (mg/L)	ACCEPTABLE DETECTION LIMIT ** (mg/L)
	Source	Method No.	Source	Method No.				
SVOCs	SW-846	3510	SW-846	8310	Acenaphthene	0.002	0.005	0.42
	SW-846	3510	SW-846	8310	Anthracene	0.0001	0.005	2.1
	SW-846	3510	SW-846	8310	Benzo(a)anthracene	0.00005	0.0001	0.00013
	SW-846	3510	SW-846	8310	Benzo(b)fluoranthene	0.0001	0.00018	0.00018
	SW-846	3510	SW-846	8310	Benzo(k)fluoranthene	0.0001	0.00017	0.00017
	SW-846	3510	SW-846	8310	Benzo(a)pyrene	0.0001	0.0002	0.0002
	SW-846	3510	SW-846	8270	Bis(2-ethylhexyl)phthalate	0.004	0.006	0.006
	SW-846	3510	SW-846	8310	Chrysene	0.0003	0.0008	0.0015
	SW-846	3510	SW-846	8270	o-Cresol	0.001	0.01	0.35
	SW-846	3510	SW-846	8270	m-Cresol	0.001	0.01	NA
	SW-846	3510	SW-846	8270	p-Cresol	0.001	0.01	NA
	SW-846	3510	SW-846	8270	Di-n-butyl phthalate	0.003	0.01	0.7
	SW-846	3510	SW-846	8310	Dibenzo(a,h)anthracene	0.0002	0.0003	0.0003
	SW-846	3510	SW-846	8270	Diethyl phthalate	0.002	0.01	5.6
	SW-846	3510	SW-846	8270	2,4-Dimethylphenol	0.001	0.01	0.14
	SW-846	3510	SW-846	8270	Dimethyl phthalate	0.001	0.01	NA
	SW-846	3510	SW-846	8270	2,4-Dinitrophenol	0.001	0.01	0.014
	SW-846	3510	SW-846	8310	Fluoranthene	0.0005	0.002	0.28
	SW-846	3510	SW-846	8310	Fluorene	0.0004	0.001	0.28
	SW-846	3510	SW-846	8310	Indeno(1,2,3-cd)pyrene	0.0001	0.0004	0.00043
	SW-846	3510	SW-846	8310	Naphthalene	0.002	0.005	0.14
	SW-846	3510	SW-846	8270	4-Nitrophenol	0.001	0.01	NA
	SW-846	3510	SW-846	8310	Phenanthrene	0.0005	0.005	NA
	SW-846	3510	SW-846	8270	Phenol	0.001	0.005	0.1
	SW-846	3510	SW-846	8310	Pyrene	0.0001	0.002	0.21
	SW-846	3510	SW-846	8270	Pyridine	0.005	0.02	NA
	SW-846	3510	SW-846	8270	Quinoline	0.001	0.005	NA

**NOTES:**

mg/L = Milligrams per liter

NA = Not available

(L) = This is the lowest limit able to be achieved by current methodologies.

µg/L = Micrograms per liter

\* = Method detection limit and practical quantitation limit as identified by Teklab, Inc. (Ottensmeier, 2004).

\*\* = Acceptable detection limit is the IPCB TACO Tier 1 Groundwater Remediation Objective for Class I Groundwater.



**TABLE 4**  
**Compound/Analyte List for Water Samples**  
**Inorganics**  
**Village of Hartford**

The Hartford Working Group / Hartford, Illinois  
 1190505040 -- Madison County -- ILR 000128249

PARAMETER	PREPARATION METHOD		ANALYTICAL METHOD		COMPOUND	METHOD DETECTION LIMIT *	PRACTICAL QUANTITATION LIMIT *	ACCEPTABLE DETECTION LIMIT **
	Source	Method No.	Source	Method No.				
<b>Metals</b>	SW-846	3020A	SW-846	7041	Antimony	0.0017	0.005	0.006
	SW-846	3020A	SW-846	7060A	Arsenic	0.0007	0.003	0.05
	SW-846	3005A	SW-846	6010	Barium	0.0024	0.005	2
	SW-846	3005A	SW-846	6010	Beryllium	0.003	0.001	0.004
	SW-846	3005A	SW-846	6010	Cadmium	0.0003	0.002	0.005
	SW-846	3005A	SW-846	6010	Chromium-Total	0.004	0.01	0.1
	SW-846	3005A	SW-846	6010	Cobalt	0.0022	0.01	1
	SW-846	3020A	SW-846	7421	Lead	0.0004	0.002	0.0075
	--	--	SW-846	7470	Mercury	0.00005	0.0002	0.002
	SW-846	3005A	SW-846	6010	Nickel	0.0033	0.01	0.1
	SW-846	3020A	SW-846	7740	Selenium	0.0035	0.006	0.05
	SW-846	3005A	SW-846	6010	Silver	0.0032	0.01	0.05
	SW-846	3005A	SW-846	6010	Vanadium	0.0032	0.01	0.049
	SW-846	3005A	SW-846	6010	Zinc	0.0021	0.01	5
<b>General</b>	--	--	SW-846	9040-B	pH	0	1	NA
	--	--	Standard Method	M2320B	Alkalinity, Total (as, Ca, CO <sub>3</sub> )	0	0	NA
	--	--	SW-846	9251.0	Chloride	0.5	1	200
	--	--	Standard Method	M5220D	COD	7.3	20	NA
	--	--	SW-846	9012A	Cyanide Total	0.0026	0.007	0.2
	--	--	Standard Method	M2340C	Hardness (as, Ca, CO <sub>3</sub> )	3	5	NA
	--	--	SW-846	9036.0	Sulfate	1.5	5	400
	--	--	Standard Method	M4500SD	Sulfide	0.013	0.50	NA
	--	--	Standard Method	M2540C	Total Dissolved Solids	10	20	NA
	--	--	Standard Method	M2540D	Total Suspended Solids	5	6	NA

**NOTES:**

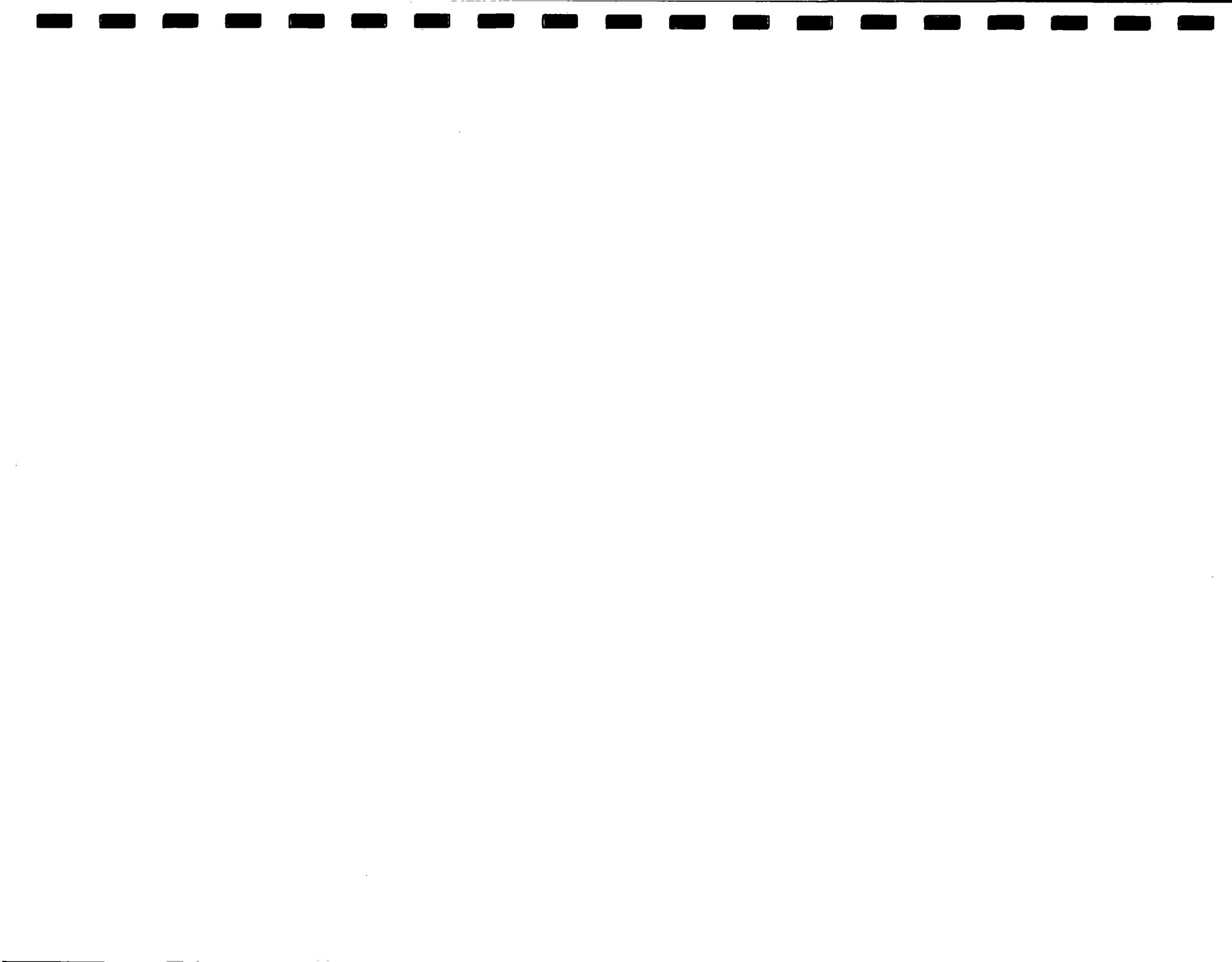
mg/L = Milligrams per liter [except for pH (unitless)].

\* = Method detection limit and practical quantitation limit as identified by Teklab, Inc. (Ottensmeier, 2004).

\*\* = Acceptable detection limit is the IPCB TACO Tier 1 Groundwater Remediation Objective for Class I Groundwater.

NA = Not available

-- = Not applicable



**TABLE 5**  
**Sample Container, Preservation, and Holding Time Requirements For**  
**Water Samples**

Hartford Working Group / Hartford, Illinois  
 1190505040 -- Madison County -- ILR 000128249

PARAMETER	ANALYSIS	HOLDING TIME	CONTAINER	PRESERVATION
Organics	VOCs	14 days	3-40 ml VOC vials	HCl to pH < 2, no headspace Maintained at 4 + 2 degrees Celcius
	Total Petroleum Hydrocarbons as Gasoline Range Organics	14 days		
	1,4-Dioxane	7 days	3-40 ml VOC vials	Unpreserved, no headspace Maintained at 4 + 2 degrees Celcius
	SVOCS	7 days	2 L amber glass jars	Unpreserved Maintained at 4 + 2 degrees Celcius
	Total Petroleum Hydrocarbons as Diesel Range Organics	7 days	1 L amber glass jar	Unpreserved Maintained at 4 + 2 degrees Celcius
Metals	Inorganic Metals	180 days	250 ml plastic jar	HNO <sub>3</sub> to pH<2 Maintained at 4 + 2 degrees Celcius
	Mercury	28 days		
General	pH	24 hours	1 L plastic jar	Unpreserved Maintained at 4 + 2 degrees Celcius
	Alkalinity	14 days		
	Chloride	28 days		
	Sulfate	28 days		
	Hardness	7 days		
	Total Dissolved Solids (TDS)	7 days		
	Total Suspended Solids (TSS)	7 days		
	Total Cyanide	14 days	500 ml plastic jar	NaOH to pH>12 Maintained at 4 + 2 degrees Celcius
	Chemical Oxygen Demand (COD)	28 days	125 ml plastic jar	H <sub>2</sub> SO <sub>4</sub> to pH<2 Maintained at 4 + 2 degrees Celcius
	Sulfide, Total	7 days	250 ml plastic jar	NaOH and ZnAcetate to pH>9 Maintained at 4 + 2 degrees Celcius

**TABLE 6**  
**Groundwater Analytical Results-Skinner List**  
**VOCs**  
**(Sentinel Wells)**

The Hartford Working Group / Hartford, IL  
 1190505040 -- Madison County -- ILR 000128249

CHEMICAL NAME	Taco Tier 1 Groundwater Remediation Objectives	SENTINEL WELL NUMBER AND COLLECTION DATE									
		HMW-25					HMW-26				
		Class I	12/16/03	4/22/04	7/7/04	Dup-001 7/7/04	10/19/04	12/16/03	4/22/04	7/7/04	10/20/04
<b>VOCs (mg/L)</b>											
1,4-Dioxane	NL	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
<b>VOCs (µg/L)</b>											
1,1,1-Trichloroethane	200	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1-Dichloroethane	700	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,2-Dibromoethane	0.05	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,2-Dichlorobenzene	600	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,2-Dichloroethane	5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,3-Dichlorobenzene	NL	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,4-Dichlorobenzene	75	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
2-Butanone	NL	<50.0	<50.0	<25.0	<25.0	<25.0	<50.0	<50.0	<25.0	<25.0	<25.0
Benzene	5.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Carbon disulfide	700	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Chlorobenzene	100	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Chloroform	0.2	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Ethylbenzene	700	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Methyl tert-butyl ether	70	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Styrene	100	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Tetrachloroethylene	5.0	<5.0	<5.0	<5.0	<5.0	1.4 J	<5.0	<5.0	<5.0	<5.0	<5.0
Toluene	1000	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Trichloroethylene	5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Xylenes (total)	10000	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0

**NOTES:**

TACO = Illinois EPA's Tiered Approach to Corrective Action Objectives.

mg/L = Milligrams per liter

µg/L = Micrograms per liter

= Detection Limit above TACO

J = Estimated value. Compound detected below the practical quantitation limit (PQL).

**Bold** and highlighted values exceed TACO GROs.

NL = No groundwater remediation objective listed in TACO

**TABLE 6**  
**Groundwater Analytical Results-Skinner List**  
**VOCs**  
*(Sentinel Wells)*

The Hartford Working Group / Hartford, IL  
 1190505040 -- Madison County -- ILR 000128249

CHEMICAL NAME	Taco Tier 1 Groundwater Remediation Objectives	SENTINEL WELL NUMBER AND COLLECTION DATE												
		HMW-27				HMW-28				HMW-29				
		Class I	12/16/03	4/22/04	Dup-01 4/22/04	7/7/04	10/20/04	12/16/03	4/22/04	7/7/04	10/20/04	12/17/03	4/22/04	7/7/04
<b>VOCs (mg/L)</b>	<b>(mg/L)</b>													
1,4-Dioxane	NL	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
<b>VOCs (µg/L)</b>	<b>(µg/L)</b>													
1,1,1-Trichloroethane	200	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1-Dichloroethane	700	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,2-Dibromoethane	0.05	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,2-Dichlorobenzene	600	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,2-Dichloroethane	5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,3-Dichlorobenzene	NL	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,4-Dichlorobenzene	75	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
2-Butanone	NL	<50.0	<50.0	<50.0	<25.0	<25.0	<50.0	<50.0	<25.0	<25.0	<50.0	<50.0	<25.0	<25.0
Benzene	5.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Carbon disulfide	700	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Chlorobenzene	100	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Chloroform	0.2	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Ethylbenzene	700	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Methyl tert-butyl ether	70	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Styrene	100	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Tetrachloroethylene	5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Toluene	1000	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Trichloroethylene	5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Xylenes (total)	10000	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0

**NOTES:** TACO = Illinois EPA's Tiered Approach to Corrective Action Objectives.

mg/L = Milligrams per liter

µg/L = Micrograms per liter

= Detection Limit above TACO

J = Estimated value. Compound detected below the practical quantitation limit (PQL).

**Bold** and highlighted values exceed TACO GROs.

NL = No groundwater remediation objective listed in TACO

**TABLE 7**  
**Groundwater Analytical Results-Skinner List**  
**SVOCs**  
*(Sentinel Wells)*

The Hartford Working Group / Hartford, IL  
 1190505040 -- Madison County -- ILR 000128249

CHEMICAL NAME	TACO Tier 1 Groundwater Remediation Objectives Class I (mg/L)	SENTINEL WELL NUMBER AND COLLECTION DATE									
		HMW-25					HMW-26				
		12/16/03	4/22/04	7/7/04	Dup-001 7/7/04	10/19/04	12/16/03	4/22/04	7/7/04	10/20/04	Dup-001 10/20/04
<b>SVOCs (mg/L)</b>											
2,4-Dimethylphenol	0.14	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
2,4-Dinitrophenol	0.014	<0.010	<0.010	<0.010	<0.010	<0.020	<0.010	<0.010	<0.010	<0.020	<0.020
4-Nitrophenol	NL	<0.010	<0.010	<0.010	<0.010	<0.020	<0.010	<0.010	<0.010	<0.020	<0.020
Bis(2-ethylhexyl)phthalate	0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
Di-n-butyl phthalate	0.7	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Diethyl phthalate	5.6	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Dimethyl phthalate	NL	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
m,p-Cresol	NL	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
o-Cresol	0.35	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Phenol	0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Pyridine	NL	<0.020	<0.020	<0.020	<0.020	<0.010	<0.020	<0.020	<0.020	<0.010	<0.010
Quinoline	NL	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Acenaphthene	0.42	<0.00500	<0.010	<0.00300	<0.00300	<0.00300	<0.00500	<0.010	<0.00300	<0.00300	<0.00300
Acenaphthylene	NL	NA	NA	NA	NA	<0.00150	NA	NA	NA	<0.00150	<0.00150
Anthracene	2.1	<0.00500	<0.010	<0.00030	<0.00030	<0.00030	<0.00500	<0.010	<0.00030	<0.00030	<0.00030
Benzo(a)anthracene	0.00013	<0.00010	<0.010	<0.00009	<0.00009	<0.00009	<0.00010	<0.010	<0.00009	<0.00009	<0.00009
Benzo(a)pyrene	0.0002	<0.00020	<0.010	<0.00012	<0.00012	<0.00012	<0.00020	<0.010	<0.00012	<0.00012	<0.00012
Benzo(b)fluoranthene	0.00018	<0.00018	<0.010	<0.00015	<0.00015	<0.00015	<0.00018	<0.010	<0.00015	<0.00015	<0.00015
Benzo(k)fluoranthene	0.00017	<0.00017	<0.010	<0.00015	<0.00015	<0.00015	<0.00017	<0.010	<0.00015	<0.00015	<0.00015
Chrysene	0.0015	<0.00080	<0.010	<0.00045	<0.00045	<0.00045	<0.00080	<0.010	<0.00045	<0.00045	<0.00045
Dibenzo(a,h)anthracene	0.0003	<0.00030	<0.010	<0.00018	<0.00018	<0.00018	<0.00030	<0.010	<0.00018	<0.00018	<0.00018
Fluoranthene	0.28	<0.00200	<0.010	<0.00090	<0.00090	<0.00090	<0.00200	<0.010	<0.00090	<0.00090	<0.00090
Fluorene	0.28	<0.00100	<0.010	<0.00030	<0.00030	<0.00030	<0.00100	<0.010	<0.00030	<0.00030	<0.00030
Indeno(1,2,3-cd)pyrene	0.00043	<0.00040	<0.010	<0.00030	<0.00030	<0.00030	<0.00040	<0.010	<0.00030	<0.00030	<0.00030
Naphthalene	0.14	<0.00500	<0.010	<0.00300	<0.00300	<0.00300	<0.00500	<0.010	<0.00300	<0.00300	<0.00300
Phenanthrene	NL	<0.00500	<0.010	<0.00060	<0.00060	<0.00060	<0.00500	<0.010	<0.00060	<0.00060	<0.00060
Pyrene	0.21	<0.00200	<0.010	<0.00030	<0.00030	<0.00030	<0.00200	<0.010	<0.00030	<0.00030	<0.00030

**NOTES:** TACO = Illinois EPA's Tiered Approach to Corrective Action Objectives.

mg/L = Milligrams per liter

µg/L = Micrograms per liter

[ ] = Detection Limit above TACO

J = Estimated value. Compound detected below the practical quantitation limit (PQL).

**Bold** and highlighted values exceed TACO-GROs.

NA = Constituent not analyzed by laboratory

NL = No groundwater remediation objective listed in TACO

**TABLE 7**  
**Groundwater Analytical Results-Skinner List**  
**SVOCs**  
**(Sentinel Wells)**

The Hartford Working Group / Hartford, IL  
 1190505040 -- Madison County -- ILR 000128249

CHEMICAL NAME	TACO Tier 1 Groundwater Remediation Objectives Class I (mg/L)	SENTINEL WELL NUMBER AND COLLECTION DATE												
		HMW-27				HMW-28				HMW-29				
		12/16/03	4/22/04	Dup-01 4/22/04	7/7/04	10/20/04	12/16/03	4/22/04	7/7/04	10/20/04	12/17/03	4/22/04	7/7/04	10/20/04
<b>SVOCs (mg/L)</b>														
2,4-Dimethylphenol	0.14	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.011	<0.010	<0.010	<0.010	<0.010
2,4-Dinitrophenol	0.014	<0.010	<0.010	<0.010	<0.010	<0.020	<0.010	<0.010	<0.010	<0.020	<0.011	<0.010	<0.010	<0.020
4-Nitrophenol	NL	<0.010	<0.010	<0.010	<0.010	<0.020	<0.010	<0.010	<0.010	<0.020	<0.011	<0.010	<0.010	<0.020
Bis(2-ethylhexyl)phthalate	0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
Di-n-butyl phthalate	0.7	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.011	<0.010	<0.010	<0.010
Diethyl phthalate	5.6	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.011	<0.010	<0.010	<0.010
Dimethyl phthalate	NL	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.011	<0.010	<0.010	<0.010
m,p-Cresol	NL	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.011	<0.010	<0.010	<0.010
o-Cresol	0.35	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.011	<0.010	<0.010	<0.010
Phenol	0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Pyridine	NL	<0.020	<0.020	<0.020	<0.020	<0.010	<0.020	<0.020	<0.020	<0.010	<0.021	<0.020	<0.020	<0.010
Quinoline	NL	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Acenaphthene	0.42	<0.00500	<0.010	<0.010	<0.00300	<0.00300	<0.00500	<0.010	<0.00300	<0.00300	<0.00500	<0.010	<0.00300	<0.00300
Acenaphthylene	NL	NA	NA	NA	NA	<0.00150	NA	NA	NA	<0.00150	NA	NA	NA	<0.00150
Anthracene	2.1	<0.00500	<0.010	<0.010	<0.00030	<0.00030	<0.00500	<0.010	<0.00030	<0.00030	<0.00500	<0.010	<0.00030	<0.00030
Benzo(a)anthracene	0.00013	<0.00010	<0.010	<0.010	<0.00009	<0.00009	<0.00010	<0.010	<0.00009	<0.00009	<0.00010	<0.010	<0.00009	<0.00009
Benzo(a)pyrene	0.0002	<0.00020	<0.010	<0.010	<0.00012	<0.00012	<0.00020	<0.010	<0.00012	<0.00012	<0.00020	<0.010	<0.00012	<0.00012
Benzo(b)fluoranthene	0.00018	<0.00018	<0.010	<0.010	<0.00015	<0.00015	<0.00018	<0.010	<0.00015	<0.00015	<0.00018	<0.010	<0.00015	<0.00015
Benzo(k)fluoranthene	0.00017	<0.00017	<0.010	<0.010	<0.00015	<0.00015	<0.00017	<0.010	<0.00015	<0.00015	<0.00017	<0.010	<0.00015	<0.00015
Chrysene	0.0015	<0.00080	<0.010	<0.010	<0.00045	<0.00045	<0.00080	<0.010	<0.00045	<0.00045	<0.00080	<0.010	<0.00045	<0.00045
Dibenzo(a,h)anthracene	0.0003	<0.00030	<0.010	<0.010	<0.00018	<0.00018	<0.00030	<0.010	<0.00018	<0.00018	<0.00030	<0.010	<0.00018	<0.00018
Fluoranthene	0.28	<0.00200	<0.010	<0.010	<0.00090	<0.00090	<0.00200	<0.010	<0.00090	<0.00090	<0.00200	<0.010	<0.00090	<0.00090
Fluorene	0.28	<0.00100	<0.010	<0.010	<0.00030	<0.00030	<0.00100	<0.010	<0.00030	<0.00030	<0.00100	<0.010	<0.00030	<0.00030
Indeno(1,2,3-cd)pyrene	0.00043	<0.00040	<0.010	<0.010	<0.00030	<0.00030	<0.00040	<0.010	<0.00030	<0.00030	<0.00040	<0.010	<0.00030	<0.00030
Naphthalene	0.14	<0.00500	<0.010	<0.010	<0.00300	<0.00300	<0.00500	<0.010	<0.00300	<0.00300	<0.00500	<0.010	<0.00300	<0.00300
Phenanthrene	NL	<0.00500	<0.010	<0.010	<0.00060	<0.00060	<0.00500	<0.010	<0.00060	<0.00060	<0.00500	<0.010	<0.00060	<0.00060
Pyrene	0.21	<0.00200	<0.010	<0.010	<0.00030	<0.00030	<0.00200	<0.010	<0.00030	<0.00030	<0.00200	<0.010	<0.00030	<0.00030

**NOTES:** TACO = Illinois EPA's Tiered Approach to Corrective Action Objectives.

mg/L = Milligrams per liter

µg/L = Micrograms per liter

  = Detection Limit above TACO

J = Estimated value. Compound detected below the practical quantitation limit (PQL).

**Bold** and highlighted values exceed TACO GROs.

NA = Constituent not analyzed by laboratory

NL = No groundwater remediation objective listed in TACO

**TABLE 8**  
**Groundwater Analytical Results-Skinner List**  
**Metals**  
*(Sentinel Wells)*

The Hartford Working Group / Hartford, IL  
 1190505040 -- Madison County -- IL 000128249

CHEMICAL NAME	TACO Tier 1 Groundwater Remediation Objectives Class I (mg/L)	SENTINEL WELL NUMBER AND COLLECTION DATE									
		HMW-25					HMW-26				
		12/16/03	4/22/04	7/7/04	Dup-001 7/7/04	10/19/04	12/16/03	4/22/04	7/7/04	10/20/04	Dup-001 10/20/04
<b>Metals (mg/L)</b>											
Barium	2	0.318	0.238	0.256	0.257	0.300	0.362	0.242	0.222	0.206	0.202
Beryllium	0.004	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0003 J	<0.0010	<0.0010	<0.0010	<0.0010
Cadmium	0.005	<0.0020	0.0004 J	0.0003J	0.0003J	0.004J	<0.0020	<0.0020	0.0003J	<0.0020	0.0003J
Chromium	0.1	0.0098J	0.0061 J	<0.0100	<0.0100	<0.0100	0.0311	0.0041 J	<0.0100	<0.0100	<0.0100
Cobalt	1	0.0045J	<0.0100	<0.0100	<0.0100	<0.0100	0.0077 J	<0.0100	<0.0100	<0.0100	<0.0100
Nickel	0.1	0.0178	0.0128	0.0087J	0.0107	0.0149	0.0219	<0.0100	<0.0100	<0.0100	<0.0100
Silver	0.05	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Vanadium	0.049	0.0093J	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Zinc	5	0.210	0.241	0.0838	0.0832	0.171	0.276	0.118	0.0258	0.105	0.129
Antimony	0.006	<0.0050	0.0023 J	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Arsenic	0.05	0.0011J	<0.0030	<0.0030	<0.0030	<0.0030	0.0045	0.0065	0.0012J	0.0020J	0.0017J
Lead	0.0075	0.0053	<0.0020	<0.0020	<0.0020	0.0009J	0.0159	0.0033	<0.0020	0.0008J	0.0006J
Selenium	0.05	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060
Mercury	0.002	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
<b>General Chemistry (mg/L)</b>											
Cyanide	0.2	<0.007	<0.007	<0.007	<0.007	<0.007	<0.050	<0.007	<0.007	<0.050	<0.050

**NOTES:** TACO = Illinois EPA's Tiered Approach to Corrective Action Objectives.

mg/L = Milligrams per liter

µg/L = Micrograms per liter

J = Estimated value. Compound detected below the practical quantitation limit (PQL).

**Bold** and highlighted values exceed TACO GROs.

NL = No groundwater remediation objective listed in TACO

**TABLE 8**  
**Groundwater Analytical Results-Skinner List**  
**Metals**  
*(Sentinel Wells)*

The Hartford Working Group / Hartford, IL  
 1190505040 -- Madison County -- IL 000128249

CHEMICAL NAME	Taco Tier 1 Groundwater Remediation Objectives Class I (mg/L)	SENTINEL WELL NUMBER AND COLLECTION DATE												
		HMW-27				HMW-28				HMW-29				
		12/16/03	4/22/04	Dup-01 4/22/04	7/7/04	10/20/04	12/16/03	4/22/04	7/7/04	10/20/04	12/17/03	4/22/04	7/7/04	10/20/04
<b>Metals (mg/L)</b>														
Barium	2	0.175	0.189	0.198	0.182	0.119	0.107	0.273	0.115	0.173	0.139	0.268	0.16	0.221
Beryllium	0.004	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Cadmium	0.005	0.0003 J	<0.0020	<0.0007	<0.0020	0.0006J	<0.0020	0.0011 J	0.0011J	0.0004J	0.0007 J	0.0009 J	0.0005J	0.0007J
Chromium	0.1	0.0091 J	<0.0100	<0.0100	<0.0100	<0.0100	0.0059 J	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Cobalt	1	0.0047 J	0.0089 J	0.0084 J	0.0048J	0.0095J	0.0092 J	0.0145	0.0068J	0.0193	<0.0100	0.0060 J	0.0025J	0.0052J
Nickel	0.1	0.0112	0.0175	0.0175	0.0092J	0.0220	0.0221	0.0325	0.0218	0.0268	0.0038 J	0.0232	0.0073J	0.0152
Silver	0.05	<0.0100	<0.0100	0.0033 J	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	0.0065 J	<0.0100	<0.0100	<0.0100
Vanadium	0.049	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Zinc	5	0.213	0.0800	0.0910	0.0431	0.170	0.0827	0.0840	0.0741	0.129	0.0258	0.136	0.0402	0.0345
Antimony	0.006	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Arsenic	0.05	<0.0030	0.0018 J	0.0012 J	<0.0030	<0.0030	0.0014 J	0.0090	<0.0030	0.0044	0.0064	0.0066	0.0012J	0.0035
Lead	0.0075	0.0008 J	0.0017 J	0.0026	<0.0020	0.0019J	0.0024	0.0076	0.0028	0.0048	0.0016 J	0.0238	0.0020J	0.0134
Selenium	0.05	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	0.0109	0.0207	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060
Mercury	0.002	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
<b>General Chemistry (mg/L)</b>														
Cyanide	0.2	<0.007	<0.007	<0.007	<0.007	<0.050	<0.007	0.004 J	<0.007	<0.050	<0.007	0.003 J	<0.007	<0.050

**NOTES:**

TACO = Illinois EPA's Tiered Approach to Corrective Action Objectives.

mg/L = Milligrams per liter

µg/L = Micrograms per liter

J = Estimated value. Compound detected below the practical quantitation limit (PQL).

**Bold** and highlighted values exceed TACO GROs.

NL = No groundwater remediation objective listed in TACO

**TABLE 9**  
**Groundwater Analytical Results**  
**General Chemistry**  
**(Sentinel Wells)**

The Hartford Working Group / Hartford, IL  
 1190505040 -- Madison County -- IL 000128249

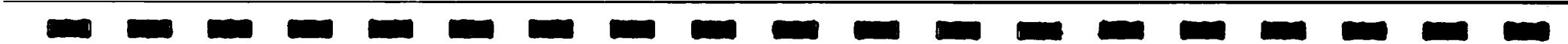
CHEMICAL NAME	Taco Tier 1 Groundwater Remediation Objectives Class I (mg/L)	SENTINEL WELL NUMBER AND COLLECTION DATE					
		HMW-25 10/19/04	HMW-26		HWM-27 10/20/04	HMW-28 10/20/04	HMW-29 10/20/04
			10/20/04	Dup-001 10/20/04			
<b>General Chemistry (mg/L)</b>							
Alkalinity	NL	496	584	604	628	548	654
Chemical Oxygen Demand	NL	16 J	16 J	23	23	23	46
Chloride	200	96	92	100	20	36	15
Cyanide	0.2	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Hardness	NL	540	910	920	830	630	540
pH	NL	6.90	6.72	6.71	6.76	6.80	6.88
Sulfate	400	57	301	341	208	82	84
Total Dissolved Solids	NL	714	1210	1230	928	686	622
Total Sulfide	NL	0.02 J	0.02 J	0.03 J	0.03 J	<0.50	<1.2
Total Suspended Solids	NL	9	47	67	35	48	550

NOTES: TACO = Illinois EPA's Tiered Approach to Corrective Action Objectives.

mg/L = Milligrams per liter

J = Estimated value. Compound detected below the practical quantitation limit (PQL).

NL = No groundwater remediation objective listed in TACO







## **APPENDIX A**

### **MONITORING WELL INSPECTION REPORT**

## EXISTING WELL INTEGRITY SURVEY FORM

## PROJECT INFORMATION

Project Name: Hartford Work Group

Project No.:

Date(s) of Inspection: Oct 18 2004Field Personnel: B Hackman, P Day

## WELL INTEGRITY INFORMATION

Well ID	Static Levels			Well Casing	Security	Protective Cover	Flush Mount	Concrete Pad	Bumper Posts	Grade/Slope	Additional Comment(s) Below						
	Depth to Product (FT/BTOC)	Depth to Water (FT/BTOC)	Total Well Depth (FT/BTOC)														
HMW-28				2"	PVC	Y Y		Y Y N N	Y Y N N				Y Y Y				H <sub>2</sub> O in flush more
HMW-29				2"	"	Y Y		Y Y N Y	Y Y N N				Y Y N				
MP-66 A+B				1"	"	N Y		Y Y N Y	Y Y Y N N				Y Y N				erosion around cone
MP-66 C				2"	"	Y Y		Y Y N Y	Y Y Y N N				Y Y N				
MP-65 A+B				1"	"	N Y		Y Y N Y	Y Y N N				Y Y Y				H <sub>2</sub> O in flush more
MP-65 C				2"	"	Y Y		Y Y N Y	Y Y Y N N				Y Y Y				H <sub>2</sub> O in flush more
MP-67 A+B				1"	"	N Y		Y Y N Y	Y Y N N				Y Y N				
MP-67 C				2"	"	Y Y		Y Y N Y	Y Y Y N N				Y Y Y				H <sub>2</sub> O in flush more
HMW-25				2"	"	Y Y		Y Y N Y	Y Y Y N N				Y Y Y				
HMW-26				2"	"	Y Y		Y Y N Y	Y Y N N				Y Y Y				H <sub>2</sub> O in flush more
HMW-39A				2"	"	Y Y		Y Y N Y	Y Y Y N N				Y Y Y				H <sub>2</sub> O in flush more
HMW-39B				2"	"	Y Y		Y Y N Y	Y Y Y N N				Y Y Y				flush more
HMW-39C				2"	"	Y Y		Y Y N Y	Y Y Y N N				Y Y Y				flush more

ADDITIONAL COMMENTS: replaced lock on HMW-26 (old lock rusted closed)

## EXISTING WELL INTEGRITY SURVEY FORM

## PROJECT INFORMATION

Project Name: Hartford Work Group

Project No.:

Date(s) of Inspection: Oct. 19, 2004Tues

Field Personnel:

B. Hackman P. Doyle

## WELL INTEGRITY INFORMATION

Well ID	Static Levels			Well Casing	Security	Protective Cover	Flush Mount	Concrete Pad	Bumper Posts	Grade/Slope																			
	Depth to Product (FT BT/OC)	Depth to Water (FT/BTOC)	Total Well Depth (FT/BTOC)								Diameter (Inches)	Material	Well Secured/Locked	Well Cap Present	Present	Intact	Cracked	Rubber Seal Present	Present	Intact	Cracked	Shifted Out of Place	Intact	Bent	Missing	Away From Well	Facilitates Access	Standing Water	Additional Comment(s) Below
MP-61-A+B				1"	PVC	N	Y								Y	Y	N	Y	Y	X	N	N				Y	Y	Y	
MP-61-C				2"	PVC	Y	Y								Y	Y	N	Y	Y	X	N	N				Y	Y	N	
MP-62-A+B				1"	"	N	Y								Y	Y	N	Y	Y	Y	N	N				Y	Y	Y	
MP-62-C				2"	"	Y	Y								Y	Y	N	Y	Y	Y	N	N				Y	Y	Y	
HB-38				2"	"	N	Y	Y	No lid	N									N				none			Y	N		
MP-63-A+B				1"	"	N	Y								Y	Y	N	Y	Y	Y	N	N				Y	Y	Y	
MP-63-C				2"	"	Y	Y								Y	Y	N	Y	Y	Y	N	N				Y	Y	Y	
HMW-27				2"	"	Y	Y								Y	Y	N	N	Y	Y	N	N				Y	Y	N	ment troll
HMW-43 A+B				2"	"	Y	Y								Y	Y	N	Y	Y	Y	N	N				Y	Y	'Y	sheen on H <sub>2</sub> O in tank more
HMW-43 B				2"	"	Y	Y								Y	Y	N	Y	Y	Y	N	N				Y	Y	Y	
HMW-43 C				2"	"	Y	Y								Y	Y	N	Y	Y	Y	N	N				Y	Y	Y	sheen on wa in flush ince
HMW-52 A				2"	"	Y	Y								Y	Y	N	Y	Y	Y	N	N				Y	Y	N	
HMW-52 B				2"	"	Y	Y								Y	Y	N	Y	Y	Y	N	N				Y	Y	Y	
HMW-52 C				2"	"	Y	Y								Y	Y	N	Y	Y	Y	N	N				Y	Y	Y	

ADDITIONAL COMMENTS: standing water in most of flush mounts

# EXISTING WELL INTEGRITY SURVEY FORM

## PROJECT INFORMATION

Project Name: Hartford Working Group  
 Project No.:

Date(s) of Inspection: 10-19-04  
 Field Personnel: P.D. B.H.

## WELL INTEGRITY INFORMATION

Well ID	Static Levels			Well Casing	Security	Protective Cover	Flush Mount	Concrete Pad	Bumper Posts	Grade/Slope	Additional Comment(s) Below										
	Depth to Product (FT BTOC)	Depth to Water (FT BTOC)	Total Well Depth (FT BTOC)									Diameter (Inches)	Material	Well Secured/Locked	Present	Intact	Dented	Present	Intact	Cracked	Rubber Seal Present
HMW-49A				2"	PVC	Y	Y								Y	Y	N	Y	Y	N	N
HMW-49B				2"	"	Y	Y								Y	Y	N	Y	Y	N	N
HMW-49C				2"	"	Y	Y								Y	Y	N	Y	Y	N	N
HMW-49D				2"	"	Y	Y								Y	Y	N	Y	Y	N	N
HMW-38A				2"	"	Y	Y								Y	Y	N	Y	Y	N	missing bolt
HMW-38B				2"	"	Y	Y								Y	Y	N	Y	Y	N	
HMW-38C				2"	"	Y	Y								Y	Y	N	Y	Y	N	
HMW-40A				2"	"	Y	Y								Y	Y	N	Y	Y	N	
HMW-40B				2"	"	Y	Y								Y	Y	N	Y	Y	N	
HMW-40C				2"	"	Y	Y								Y	Y	N	Y	Y	N	
HMW-51A				2"	"	Y	Y								Y	Y	N	Y	Y	N	
HMW-51B				2"	"	Y	Y								Y	Y	N	Y	Y	N	
HMW-51C				2"	"	Y	Y								Y	Y	N	Y	Y	N	shallow on 1 in flush mount
HMW-18				2"	"	Y	Y								Y	N	Y	Y	Y	N	

ADDITIONAL COMMENTS:

## EXISTING WELL INTEGRITY SURVEY FORM

## PROJECT INFORMATION

Project Name: Hartford

Project No.:

Date(s) of Inspection: 10-19-04Field Personnel: P.D. B.H.

## WELL INTEGRITY INFORMATION

Well ID	Static Levels			Well Casing	Security	Protective Cover	Flush Mount	Concrete Pad	Bumper Posts	Grade/Slope	Additional Comment(s) Below							
	Depth to Product (FT BT <sup>OC</sup> )	Depth to Water (FT BT <sup>OC</sup> )	Total Well Depth (FT BT <sup>OC</sup> )															
Well ID	Depth to Product (FT BT <sup>OC</sup> )	Depth to Water (FT BT <sup>OC</sup> )	Total Well Depth (FT BT <sup>OC</sup> )	Diameter (Inches)	Material	Well Secured/Locked	Well Cap Present	Present	Intact	Cracked	Rubber Seal Present	Present	Intact	Cracked	Shifted Out of Place	Intact	Bent	Missing
HMW-41A				2"	PVC	Y	Y		Y	Y	N	Y	Y	N	N			Y Y Y needs bolt
HMW-41B				2"	"	Y	Y		Y	Y	N	Y	Y	N	N			Y Y N
HMW-41C				2"	"	Y	Y		Y	Y	N	Y	Y	N	N			Y Y Y
HMW-42A				2"	"	Y	Y		Y	Y	N	Y	Y	N	N			Y Y Y
HMW-42B				2"	"	Y	Y		Y	Y	N	Y	Y	N	N			Y Y N
HMW-50A				2"	"	Y	Y	Y	Y	N			Y	Y	N	N	Y N N	Y Y N
HMW-50B				2"	"	Y	Y	Y	Y	N			Y	Y	N	N	Y N N	Y Y N
HMW-50C				2"	"	Y	Y	Y	Y	N			Y	Y	N	N	Y N N	Y Y N
HMW-48A				2"	"	Y	Y			Y	Y	N	Y	Y	N	N		Y Y Y
HMW-48B				2"	"	Y	Y			Y	Y	N	Y	Y	N	N		Y Y Y needs bolt
HMW-48C				2"	"	Y	Y			Y	Y	N	Y	Y	N	N		Y Y Y needs bolt
HMW-48D				2"	"	Y	Y			Y	Y	N	Y	Y	N	N		Y Y Y
HMW-4				2"	"	Y	Y			Y	Y	N	N	N	---	---		Y Y N
HMW-19				2"	"	Y	Y			Y	Y	NN	Y	Y	N	N		Y Y N

## ADDITIONAL COMMENTS:

*Cap on HMW-48C blew off allowing about 1 quart of water into well from inside flush mount - (48 c. bubbling)*

# EXISTING WELL INTEGRITY SURVEY FORM

## PROJECT INFORMATION

Project Name: Hartford

Project No.:

Date(s) of Inspection: 10-19-04  
Field Personnel: P.D/B.H

## WELL INTEGRITY INFORMATION

Well ID	Static Levels			Well Casing	Security	Protective Cover	Flush Mount	Concrete Pad	Bumper Posts	Grade/Slope	Additional Comment(s) Below											
	Depth to Product (FT BTOS)	Depth to Water (FT BTOS)	Total Well Depth (FT BTOS)																			
	Diameter (Inches)	Material	Well Secured/Locked	Well Cap Present	Present	Intact	Dented	Present	Intact	Cracked	Rubber Seal Present	Present	Intact	Cracked	Shifted Out of Place	Intact	Bent	Missing	Away From Well	Facilities Access	Standing Water	
MP-49A	1"	PVC	N	Y				Y	Y	N	Y	Y	Y	N	N				Y	Y	Y	
MP-49B																						
MP-49C	2"	PVC	Y	Y				Y	Y	N	Y	Y	Y	N	N				Y	Y	Y	
MP-40 A+B	1"	"	N	Y				Y	Y	N	Y	Y	Y	N	N				Y	Y	Y	
MP-40-C	2"	"	Y	Y				Y	Y	N	Y	Y	Y	N	N				Y	Y	Y	
MP-48 A+B	1"	"	N	Y				Y	Y	N	Y	Y	Y	N	N				Y	Y	N	
MP-48 C	2"	"	Y	Y				Y	Y	N	Y	Y	Y	N	N				Y	Y	Y	
MP-39 A+B	1"	"	N	Y				Y	Y	N	Y	Y	Y	N	N				Y	Y	Y	
MP-39 C	2"	"	Y	Y				Y	Y	N	Y	Y	Y	N	N				Y	Y	Y	
MP-38-A	1"	"	N	Y				Y	Y	N	Y	Y	Y	N	N				Y	Y	Y	
MP-38-B	1"	"	N	Y				Y	Y	N	Y	Y	Y	N	N				Y	Y	Y	
MP-38-C	2"	"	Y	Y				Y	Y	N	Y	Y	Y	N	N				Y	Y	Y	
MP-43 A+B	1"	"	N	Y				Y	Y	N	Y	Y	Y	N	N				Y	Y	Y	
MP-43-C	2"	"	Y	Y				Y	Y	N	Y	Y	Y	N	N				Y	Y	Y	

ADDITIONAL COMMENTS: \_\_\_\_\_

# EXISTING WELL INTEGRITY SURVEY FORM

## PROJECT INFORMATION

Project Name:

Hartford

Project No.:

Date(s) of Inspection: 10-19-04

Field Personnel: BH / PD

## WELL INTEGRITY INFORMATION

Well ID	Static Levels			Well Casing	Security	Protective Cover	Flush Mount	Concrete Pad	Bumper Posts	Grade/Slope	Additional Comment(s) Below											
	Depth to Product (FT BTDC)	Depth to Water (FT BTDC)	Total Well Depth (FT BTDC)																			
MP-10D				1"	PVC	N	Y	Y	Y	N	Y		Y	Y	N	N	N	N	Y	Y		
MP-10S				1"	PVC	N	Y	Y	Y	Y	Y		Y	Y	N	N	N	N	Y	Y	Y	
MP-34 A				1"	"	N	Y						Y	Y	N	N	N	N	Y	Y	Y	
MP-34 B				1"	"	N	Y						Y	Y	N	Y	N	N	Y	Y	Y	
MP-34 C				2"	"	Y	Y						Y	Y	N	Y	N	N	Y	Y	Y	measuring scale
MP-33-A				1"	"	N	Y						Y	Y	N	Y	Y	N	N	Y	Y	Y
MP-33 B+C				1"	"	N	Y						Y	Y	N	Y	Y	N	N	Y	Y	Y
MP-33-D				2"	"	Y	Y						Y	Y	N	Y	Y	Y	NN	Y	Y	Y
MP-31-A				1"	"	N	Y						Y	Y	N	Y	Y	Y	NN	Y	Y	Y
MP-31-B				1"	"	N	Y						Y	Y	N	Y	Y	Y	NN	Y	Y	Y
MP-31-C				2"	"	Y	Y						Y	Y	N	Y	Y	Y	NN	Y	Y	Y
MP-30 A+B				1"	"	N	Y						Y	Y	N		Y	Y	NN	Y	Y	Y
MP-30 C				2"	"	Y	Y						Y	Y	N	Y	Y	Y	NN	Y	Y	Y

ADDITIONAL COMMENTS:

# EXISTING WELL INTEGRITY SURVEY FORM

## PROJECT INFORMATION

Project Name: Hartford

Project No.:

Date(s) of Inspection: 10-19-04

Field Personnel: P. Doyle B. Hoekman

## WELL INTEGRITY INFORMATION

Well ID	Static Levels			Well Casing	Security	Protective Cover	Flush Mount	Concrete Pad	Bumper Posts	Grade/Slope	Additional Comment(s) Below							
	Depth to Product (FT BTOC)	Depth to Water (FT BTOC)	Total Well Depth (FT BTOC)															
	Diameter (Inches)	Material	Well Secured/Locked	Well Cap Present	Present	Intact	Dented	Present	Intact	Cracked	Rubber Seal Present	Present	Intact	Cracked	Shifted Out of Place	Intact	Bent	Missing
MP-35-A	1"	PVC	N	Y				Y	Y	N	Y	Y	N	N		Y	Y	Y
MP-35-B	1"	"	N	Y				Y	Y	N	Y	Y	N	N		N	Y	Y
MP-35-C	1"	"	N	Y				Y	Y	N	Y	Y	N	N		N	Y	Y
MP-35-D	2"	"	Y	Y				Y	Y	N	Y	Y	N	N		Y	Y	Y
MP-36-A	1"	"	N	Y				Y	Y	N	Y	Y	N	N		Y	Y	Y
MP-36-B	1"	"	N	Y				Y	Y	N	Y	Y	N	N		Y	Y	Y
MP-36-C	1"	"	Y	Y				Y	Y	N	Y	Y	N	N		Y	Y	Y
HMW46A	2"	"	Y	Y				Y	Y	N	Y	Y	N	N		Y	Y	Y
HMW46B	2"	"	Y	Y				Y	Y	N	Y	Y	N	N		Y	Y	N
HMW46C	2"	"	Y	Y				Y	Y	N	Y	Y	N	N		Y	Y	Y
JMW47A	2"	"	Y	Y				Y	Y	N	Y	Y	N	N		Y	Y	Y
HMW47B	2"	"	Y	Y				Y	Y	N	Y	Y	N	N		Y	Y	Y
HMW47C	2"	"	Y	Y				Y	Y	N	Y	Y	N	N		Y	Y	Y

ADDITIONAL COMMENTS: \_\_\_\_\_

# EXISTING WELL INTEGRITY SURVEY FORM

## PROJECT INFORMATION

Project Name:

Hartland

Project No.:

Date(s) of Inspection:

10-19-04

Field Personnel:

P.D/B.H.

## WELL INTEGRITY INFORMATION

Well ID	Static Levels			Well Casing	Security	Protective Cover	Flush Mount	Concrete Pad	Bumper Posts	Grade/Slope	Additional Comment(s) Below										
	Depth to Product (FT BTQ)	Depth to Water (FT BTQ)	Total Well Depth (FT BTQ)																		
HMW-45 A				2"	PVC	Y	Y			Y	Y	N	Y	Y	NN				Y	Y	N
HMW-45 B				2"	"	Y	Y			Y	Y	N	Y	Y	NN				Y	Y	N
HMW-45 C				2"	"	Y	Y			Y	Y	N	Y	Y	NN				Y	Y	Y
MP-64 A				1"	PVC	N	Y			Y	Y	N	Y	Y	NN				Y	Y	Y
MP-64 B				1"	"	N	Y			Y	Y	N	Y	Y	NN				Y	Y	Y
MP-64 C				2"	"	Y	Y			Y	Y	N	Y	Y	NN				Y	Y	Y
MP-58 A				1"	"	N	X			Y	Y	N	Y	Y	NN				Y	Y	Y
MP-58 B				1"	"	N	Y			Y	Y	N	Y	Y	NN				Y	Y	Y
MP-58 C				2"	"	Y	Y			Y	Y	N	Y	Y	NN				Y	Y	Y
MP-60 A				1"	"	N	Y			X	Y	N	Y	Y	NN				Y	Y	Y
MP-60 B				1"	"	N	Y			Y	Y	N	Y	Y	NN				Y	Y	Y
MP-66 C				2"	"	Y	Y			Y	Y	N	Y	Y	NN				Y	Y	Y
MP-59 A				1"	"	N	X			Y	Y	N	Y	Y	NN				Y	Y	X
MP-59 B				1"	"	N	Y			Y	Y	N	Y	Y	NN				Y	Y	Y

ADDITIONAL COMMENTS: \_\_\_\_\_

## EXISTING WELL INTEGRITY SURVEY FORM

## PROJECT INFORMATION

Project Name: Huge

Project No.:

Date(s) of Inspection:

10/18 + 19 2004

Field Personnel:

P. Doyle B. Hahman

## WELL INTEGRITY INFORMATION

Well ID	Static Levels			Well Casing	Security	Protective Cover	Flush Mount	Concrete Pad	Bumper Posts	Grade/Slope	Additional Comment(s) Below										
	Depth to Product (FT-BTOC)	Depth to Water (FT-BTOC)	Total Well Depth (FT-BTOC)																		
MP-59C				2	PVC	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
MP-13 S				1		N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N
MP-13 D				1		N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N
MP-14 S				1		N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
MP-14 D				1		N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N
MP-15 S				1		N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N
MP-15 D				1		N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N
MP-16 S				1		N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N
MP-16 D				1		N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N
MP-57A				1		N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
MP-57 B				1		N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
MP-57 C				2		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
MP-56 A				1		N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
MP-56 B				1		N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

ADDITIONAL COMMENTS: \_\_\_\_\_

# EXISTING WELL INTEGRITY SURVEY FORM

## PROJECT INFORMATION

Project Name:

HWG

Project No.:

Date(s) of Inspection:

10/18/64 - 10/19/04

Field Personnel:

P. Doyle B. Hobman

## WELL INTEGRITY INFORMATION

Well ID	Static Levels			Well Casing	Security	Protective Cover	Flush Mount	Concrete Pad	Bumper Posts	Grade/Slope	Additional Comment(s) Below								
	Depth to Product (FT BTOC)	Depth to Water (FT BTOC)	Total Well Depth (FT BTOC)																
MP-56C				2	PVC	Y	Y	TBT					Y	Y	N	N	Y	Y	Y
H/MW-20				2		Y	Y	BN					Y	Y	N	N	Y	Y	N
H/MW-44A				2		X	Y						Y	Y	N	N	Y	Y	Y
H/MW-44B				2		Y	Y						Y	Y	N	N	Y	Y	Y
H/MW-44C				2		Y	Y						Y	Y	N	N	Y	Y	N
MP-54A				1		N	Y						Y	Y	N	N	Y	Y	Y
MP-54B				1		N	Y						Y	Y	N	N	Y	Y	Y
MP-54C				2		Y	Y						Y	Y	N	N	Y	Y	Y
MP-53A				1		N	Y						Y	Y	N	N	Y	Y	Y
MP-53B				1		N	Y						Y	Y	N	N	Y	Y	Y
MP-53C				2		Y	Y						Y	Y	N	N	Y	X	X
HB-37				4		N	Y	XNN					N	N	N	N	N	Y	N
HB-37				2		N	Y	YYN					N	N	N	N	N	Y	Y
MP-57A				1		N	Y						Y	Y	N	N	Y	Y	Y

ADDITIONAL COMMENTS:

# EXISTING WELL INTEGRITY SURVEY FORM

## PROJECT INFORMATION

Project Name: JWG

Project No.:

Date(s) of Inspection: 10/18/04 - 10/19/04

Field Personnel: P. Doyle, B. Homan

## WELL INTEGRITY INFORMATION

Well ID	Static Levels			Well Casing	Security	Protective Cover	Flush Mount			Concrete Pad	Bumper Posts	Grade/Slope	Additional Comment(s) Below	
	Depth to Product (FT BTOC)	Depth to Water (FT BTOC)	Total Well Depth (FT BTOC)				Diameter (Inches)	Material	Well Secured/Locked	Well Cap Present	Present	Intact	Cracked	
MP-S2B				1	8YC	N	Y			Y Y	N Y	Y Y	N N	Y Y Y
MP-S2C				2	1	Y	Y			Y Y	N Y	Y Y	N N	Y Y Y
MP-S0A				1		N	Y			Y Y	N Y	Y Y	N N	Y Y Y
MP-S0B				1		N	Y			Y Y	N Y	Y Y	N N	Y Y Y
MP-S0C				2		Y	Y			Y Y	N Y	Y Y	N N	Y Y Y
MP-S1A				1		N	Y			Y Y	N Y	Y Y	N N	Y Y Y
MP-S1B				1		N	Y			Y Y	N Y	Y Y	N N	Y Y Y
MP-S1C				1-2"		N	Y			Y Y	N Y	Y Y	N N	Y Y Y
MP-S1D				2		Y	Y			Y Y	N Y	Y Y	N N	Y Y Y
MP-47A				1		N	Y			Y Y	N Y	Y Y	N N	Y Y Y
MP-47B				1		N	Y			Y Y	N Y	Y Y	N N	Y Y X
MP-47C				2		Y	Y			Y Y	N Y	Y Y	N N	Y Y Y
MP-46A				1		N	Y			Y Y	N Y	Y Y	A N	Y Y Y
MP-46B				1	V	N	Y			Y Y	N Y	Y Y	N N	Y Y Y

ADDITIONAL COMMENTS:

# EXISTING WELL INTEGRITY SURVEY FORM

## PROJECT INFORMATION

Project Name: fWCA

Project No.:

Date(s) of Inspection:

10/18/04 - 10/19/04

Field Personnel:

D. Cooley & B. Holman

## WELL INTEGRITY INFORMATION

Well ID	Static Levels			Well Casing	Security	Protective Cover	Flush Mount	Concrete Pad	Bumper Posts	Grade/Slope											
	Depth to Product (FT BTOPC)	Depth to Water (FT BTOPC)	Total Well Depth (FT BTOPC)								Diameter (Inches)	Material	Well Secured/Locked	Well Cap Present	Present	Intact	Cracked	Rubber Seal Present	Present		
MP-46C				2	PVC	Y	Y	X	X						Y	Y	N	Y	Y	Y	Y
MP-45A				1		N	Y								Y	Y	N	Y	Y	Y	Y
MP-45B				1		N	Y								Y	Y	N	Y	Y	Y	Y
MP-45C				2		Y	Y								Y	Y	N	Y	Y	Y	*
MP-44A				1		N	Y								Y	Y	N	Y	Y	Y	
MP-44B				1		N	Y								Y	Y	N	Y	Y	Y	
MP-44C				1		N	Y								Y	Y	N	Y	Y	Y	
MP-44D				2		Y	Y								Y	Y	N	Y	Y	Y	
MP-41A				1		N	Y								Y	Y	N	Y	Y	Y	
MP-41B				1		N	Y								Y	Y	N	Y	No	Y	
MP-41C				2		Y	Y								Y	Y	N	Y	Y	N	
HMW-13				2		Y	Y								Y	Y	N	Y	Y	Y	
HMW-14				2		Y	Y								Y	Y	N	Y	Y	N	*
MP-37A				1		N	Y								Y	Y	N	Y	Y	Y	

ADDITIONAL COMMENTS: MP 45C metal protective casing dented inside

~~HMW-12, 13, 14~~ HMW 12, 13, 14 missing 2 bolts

# EXISTING WELL INTEGRITY SURVEY FORM

## PROJECT INFORMATION

Project Name: HWG

Project No.:

Date(s) of Inspection: 10/18/04 - 10/19/04  
Field Personnel: P. Doyle v B. Holoman

## WELL INTEGRITY INFORMATION

Well ID	Static Levels			Well Casing	Security	Protective Cover	Flush Mount	Concrete Pad	Bumper Posts	Grade/Slope	Additional Comment(s) Below							
	Depth to Product (FT BTOC)	Depth to Water (FT BTOC)	Total Well Depth (FT BTOC)															
MP-37B				1	PVC	N	Y			Y	Y	H	N	Y	Y	N	N	Y Y Y
MP-37C				2	1	Y	Y			Y	Y	N	Y	Y	Y	N	N	Y Y Y
MP-38D				2	1	Y	Y			Y	Y	N	Y	Y	Y	N	N	Y Y Y
MP-29A				1	1	N	Y			Y	Y	N	Y	Y	Y	N	N	Y Y Y
MP-29B				1	1	N	Y			Y	Y	N	Y	Y	Y	N	W	Y Y Y
MP-29C				1	1	Y	Y			Y	Y	N	Y	Y	Y	N	N	Y X Y
MP-29D				2	1	Y	Y			Y	X	N	Y	X	Y	N	Y	Y Y N
HMW-7				2	1	Y	Y	YY		Y	Y	N	Y	Y	Y	N	N	Y Y N *PVC is broken
HMW-8				2	1	Y	Y	Y	Y	Y	N	Y	Y	Y	N	Y	N	Y Y N *cracked
RW-4A				4	1	Y	Y			Y	Y	N	Y	Y	Y	N	N	Y Y Y
RW-4				4	1	Y	Y			Y	Y	N	Y	Y	X	NN		Y Y N
HMW-30				2	1	Y	Y			Y	Y	N	Y	Y	Y	N	N	Y Y Y
HMW-31				2	1	Y	Y			Y	Y	N	Y	Y	Y	N	N	Y Y N
HMW-32				2	1	Y	Y			Y	Y	N	Y	Y	Y	N	N	Y Y N

ADDITIONAL COMMENTS:

# EXISTING WELL INTEGRITY SURVEY FORM

## PROJECT INFORMATION

Project Name: HW6

Project No.:

Date(s) of Inspection:

10/16/04 - 10/19/04

Field Personnel:

D. Doyle & B. Hohmann

## WELL INTEGRITY INFORMATION

Well ID	Static Levels			Well Casing	Security	Protective Cover	Flush Mount	Concrete Pad	Bumper Posts	Grade/Slope	Additional Comments Below																	
	Depth to Product (FT BTOC)	Depth to Water (FT BTOC)	Total Well Depth (FT BTOC)									Diameter (Inches)	Material	Well Secured/Locked	Well Cap Present	Present	Intact	Cracked	Rubber Seal Present	Present	Intact	Cracked	Shifted Out of Place	Intact	Bent	Missing	Away From Well	Facilities Access
HW-33				2	PVC	Y	Y							Y	Y	N	N	Y	Y	N	N	N			Y	Y	Y	MISSING 1 BENT
MP-95				1		N	Y							Y	Y	+	N	Y	Y	N	N	N			Y	Y	N	
MP-97				1		N	Y							Y	Y	N	N	Y	Y	N	N	N			Y	Y	N	
MP-85 <sup>PL</sup>				1		N	N							Y	Y	N	Y	Y	Y	N	N	N			Y	Y	N	
HW-21				2		Y	Y							X	X	N	N	Y	Y	N	N	N			Y	Y	Y	
HW-22				2		Y	Y							Y	X	N	N	Y	Y	N	N	N			Y	Y	Y	
MP-42A				1		N	Y							Y	X	N	Y	X	Y	N	N	N			Y	Y	Y	
MP-42B				1		N	Y							Y	Y	N	Y	Y	Y	N	N	N			Y	Y	Y	
MP-42C				2		Y	Y							Y	Y	N	X	X	Y	N	N	N			X	Y	Y	
MP-25				1		N	Y							Y	Y	N	Y	Y	Y	N	N	N			Y	Y	Y	
HW-34				2		Y	Y							Y	Y	N	Y	X	Y	N	N	N			Y	Y	N	
HW-35				2		Y	Y							Y	Y	N	Y	Y	Y	N	N	N			Y	Y	Y	
MP-26				1		N	Y							Y	X	N	Y	Y	Y	N	N	N			X	Y	Y	
MP-27				1		N	Y							Y	Y	N	Y	X	Y	N	N	N			Y	Y	Y	

ADDITIONAL COMMENTS:

# EXISTING WELL INTEGRITY SURVEY FORM

## PROJECT INFORMATION

Project Name: HWG

Project No.:

Date(s) of Inspection:

10/18/04 - 10/19/04

Field Personnel:

D. Doyle & B. Hohenman

## WELL INTEGRITY INFORMATION

Well ID	Static Levels			Well Casing	Security	Protective Cover	Flush Mount	Concrete Pad	Bumper Posts	Grade/Slope	Additional Comment(s) Below										
	Depth to Product (FT-BTOC)	Depth to Water (FT-BTOC)	Total Well Depth (FT-BTOC)																		
HMW-36				2	PVC	Y	Y	BT		Y	Y	N	N					Y	Y	Y	
HMW-37				2		Y	Y			Y	Y	N	Y	Y	Y	Y	N	Y	Y	Y	
MP-2B				1		N	Y			Y	Y	N	Y	Y	Y	M	N		Y	Y	missing belt
HMW-02				2		Y	Y			Y	N	Y	YKA down	Y	Y	N	N		Y	Y	N
HMW-01				2		Y	Y			Y	Y	N	N	Y	Y	N	N		Y	Y	N
RW-2				4		X	Y			Y	Y	H	Y	Y	Y	N	N		Y	Y	Y
RWS-5				4		N	Y			Y	Y	Y		N	—	—	—	N	Y	Y	—
IEPA-4				2	X	N	Y			Y	N	Y		N	—	—	—	N	Y	Y	—
HMW-9				2	PVC	Y	Y	X	X	Y	Y	N	X	Y	Y	N	N		Y	Y	N
HMW-10				2	PVC	Y	Y	X	X	Y	Y	N	X	Y	Y	N	N		Y	Y	N
HB-33				2		Y	Y			Y	Y	Y	X	N	—	—	—	N	Y	Y	N
HB-32				2		Y	Y			Y	Y	N		Y	Y	N	N		Y	Y	N

ADDITIONAL COMMENTS: well cap is stuck inside IEPA 4 - can over top

HB-33 No protective bar over well cap

## **EXISTING WELL INTEGRITY SURVEY FORM**

## PROJECT INFORMATION

**Project Name:**

Date(s) of Inspection:

Project No.:

### **Field Personnel:**

## WELL INTEGRITY INFORMATION

**ADDITIONAL COMMENTS:**

**Appendix B**

**Appendix B**

## **APPENDIX B**

### **SUMMARY OF INDICATOR PARAMETER MEASUREMENTS OBTAINED DURING OCTOBER 2004 SAMPLING EVENT**

INSTRUCTIONS: This is the raw data export format from the Win-Situ Low Flow Cell data file:Hartford Work Group-15-03095.12-002-HMW-25-10-19-2004.flo To Generate a report insert a new sheet based on a sheet template. See 'Sheet Template' and 'Insert a new sheet that's based on a custom template' in Excel help. An example template, InSituLowFlow.xls, is provided by the Win-Situ Installation. You may copy this template from the templates subfolder in the folder where Win-Situ is installed to your Excel templates directory.

Operator Name: NORMAN BOLIVAR  
 Company Name: CLAYTON GROUP SERVICES  
 Project Name: Premcor-Hartford Work Group  
 Site Name: 15-03095.12-002  
 Well ID: HMW-25

pH Sensor:	Installed	Target Value	0.1	[pH]	Target Percent	0	[%]
ORP Sensor:	Installed	Target Value	200	[mV]	Target Percent	0	[%]
DO Sensor:	Installed	Target Value	1	[mg/L]	Target Percent	0	[%]
Cond Sensor:	Installed	Target Value	200	[uS/cm]	Target Percent	0	[%]
Turb Sensor:	Installed	Target Value	200	[NTU]	Target Percent	0	[%]

Pump Model/Type: BLADDER  
 Tubing Type: PVC  
 Tubing Diam: 0.25 [in]  
 Tubing Length: 38 [ft]  
 Well Depth: 38.71 [ft]  
 Well Diam: 2 [in]  
 Screen Len: 180 [in]  
 Screen Depth: 24 [ft]  
 Pump Inlet Depth: 0 [in]  
 Depth to Water: 28.57 [ft]  
 Pump Level (TOC): 31.5 [ft]  
 Final Pumping Rate: 200 [mL/min]  
 Stable Draw Down: 0 [in]  
 Total Volume Formula: Volume = cup (200 mL) + tubing (1.9 mL) - pH\_ORP (16 mL) - DO (14 mL) - Cond (13 mL) - Turb (40 mL)  
 Calculated Total Volume: 118.87 [mL]  
 Actual Total Volume: 118.87 [mL]  
 Calculated Measurement Interval: 36 [sec]  
 Actual Measurement Interval: 36 [sec]  
 Start date/time: 10/19/2004 15:48:13  
 End date/time: 10/19/2004 15:56:50  
 Total Time: 0:08:37

Reading #	pH [pH]	Variance	ORP [mV]	Variance	DO [mg/L]	Variance	Cond [uS/cm]	Variance	Turb [NTU]	Variance	Temp [C]	Variance	Time
4	6.52	0.01	175.67	-2.92	0.34	-0.05	1025.26	-0.22	6.39	-0.38	15.6	0	15:54:21
3	6.53	0.01	173.43	-2.23	0.31	-0.04	1024.6	-0.66	6.03	-0.36	15.53	-0.07	15:54:56
2	6.54	0.01	170.77	-2.66	0.29	-0.02	1025.05	0.45	5.19	-0.84	15.56	0.03	15:55:33
1	6.55	0	168.89	-1.89	0.27	-0.01	1024.17	-0.88	6.15	0.96	15.58	0.02	15:56:09
0	6.56	0.01	166.61	-2.27	0.26	-0.01	1021.97	-2.2	5.29	-0.86	15.57	-0.01	15:56:47

pH Min: 6.52  
 pH Max: 6.56  
 ORP Min: 166.61  
 ORP Max: 175.67  
 DO Min: 0.26  
 DO Max: 0.34  
 Cond Min: 1021.97

Cond Max: 1025.26  
Turb Min: 5.19  
Turb Max: 6.39  
Temp Min: 15.53  
Temp Max: 15.6

Notes:

Device Record: Troll 9000 Profiler XP  
In-Situ Inc.  
Report generated: 11/22/2004 14:20:39  
Report from file: ...\\Hartford Work Group-15-03095.12-002-HMW-25-10-19-2004.flo.bin  
Win-Situ Version: 4.51  
Serial number: 30627  
Firmware Version: 1.39  
Unit name: MP Troll 9000  
Test name: LowFlow  
Test defined on: 10/19/2004 15:48:13  
Test started on: 10/19/2004 15:48:13  
Test stopped on: N/A N/A

Data gathered using Event testing

Time between data points: 0.0 Seconds.  
Time between default storages: 0.0 Seconds.  
Monitoring data on channel [1]  
Data stored if delta value exceeds: 0 Fahrenheit  
Number of data samples: 15

TOTAL DATA SAMPLES 15

Channel number [1] Temperature  
Measurement type:  
Channel name:

Channel number [3] Barometric Pressure  
Measurement type:  
Channel name:

Channel number [4] Turbidity  
Measurement type:  
Channel name:

Channel number [5] Battery Voltage  
Measurement type:  
Channel name:

Channel number [11] ORP  
Measurement type:  
Channel name:

Channel number [12] pH  
Measurement type:  
Channel name:

Channel number [25]

Measurement type: Dissolved Oxygen

Channel name:

Channel number [45]

Measurement type: Conductivity, Low Range

Channel name:

Date	Time	ET (sec)	Chan[1] Temp F	Chan[3] Barometric Inches Hg	Chan[4] Turbidity NTU	Chan[5] Battery Volts	Chan[11] ORP millivolts	Chan[12] pH pH	Chan[25] Clark DO ug/L	Chan[45] Conductivity mScm
10/19/2004	15:48:13	0	60.52	29.353	6.3	2.696	211	6.45	7070	1016.49
10/19/2004	15:48:50	37	60.19	29.352	6.4	2.696	204	6.41	4068	1033.72
10/19/2004	15:49:27	74	60.15	29.351	7.6	2.696	201	6.42	2297	1034.16
10/19/2004	15:50:03	110	60.07	29.351	7.7	2.696	198	6.44	1634	1032.58
10/19/2004	15:50:40	147	60.08	29.35	8.5	2.696	195	6.46	1147	1034.16
10/19/2004	15:51:17	184	60.14	29.35	7.2	2.696	191	6.47	835	1031.69
10/19/2004	15:51:54	221	59.97	29.35	7.2	2.696	188	6.48	634	1029.46
10/19/2004	15:52:30	257	60.07	29.35	7.6	2.696	185	6.48	497	1027.9
10/19/2004	15:53:07	294	60.08	29.349	6.8	2.696	182	6.5	427	1027.24
10/19/2004	15:53:44	331	60.09	29.348	6.8	2.696	179	6.51	395	1025.47
10/19/2004	15:54:21	368	60.09	29.348	6.4	2.696	176	6.52	343	1025.26
10/19/2004	15:54:56	403	59.96	29.347	6	2.696	173	6.53	307	1024.6
10/19/2004	15:55:33	440	60.01	29.347	5.2	2.696	171	6.54	288	1025.05
10/19/2004	15:56:09	476	60.05	29.347	6.2	2.696	169	6.55	274	1024.17
10/19/2004	15:56:47	514	60.02	29.347	5.3	2.696	167	6.56	264	1021.97

INSTRUCTIONS: This is the raw data export format from the Win-Situ Low Flow Cell data file:Hartford Working Group-15-03095.15.003-HMW-26-10-20-2004.flo To Generate a report insert a new sheet based on a sheet template. See 'Sheet Template' and 'Insert a new sheet that's based on a custom template' in Excel help. An example template, InSituLowFlow.xlt, is provided by the Win-Situ Installation. You may copy this template from the templates subfolder in the folder where Win-Situ is installed to your Excel templates directory.

Operator Name: NORMAN BOLIVAR  
 Company Name: CLAYTON GROUP SERVICES  
 Project Name: Hartford Working Group  
 Site Name: 15-03095.15.003  
 Well ID: HMW-26

pH Sensor:	Installed	Target Value	0.1	[pH]	Target Percent	0	[%]
ORP Sensor:	Installed	Target Value	200	[mV]	Target Percent	0	[%]
DO Sensor:	Installed	Target Value	1	[mg/L]	Target Percent	0	[%]
Cond Sensor:	Installed	Target Value	200	[uS/cm]	Target Percent	0	[%]
Turb Sensor:	Installed	Target Value	200	[NTU]	Target Percent	0	[%]

Pump Model/Type: BLADDER  
 Tubing Type: PVC  
 Tubing Diam: 0.25 [in]  
 Tubing Length: 39 [ft]  
 Well Depth: 40 [ft]  
 Well Diam: 2 [in]  
 Screen Len: 180 [in]  
 Screen Depth: 25 [ft]  
 Pump Inlet Depth: 0 [in]  
 Depth to Water: 25.59 [ft]  
 Pump Level (TOC): 32.5 [ft]  
 Final Pumping Rate: 200 [mL/min]  
 Stable Draw Down: 0 [in]  
 Total Volume Formula: Volume = cup (200 mL) + tubing (1.9 mL) - pH\_ORP (16 mL) - DO (14 mL) - Cond (13 mL) - Turb (40 mL)  
 Calculated Total Volume: 118.91 [mL]  
 Actual Total Volume: 118.91 [mL]  
 Calculated Measurement Interval: 36 [sec]  
 Actual Measurement Interval: 36 [sec]  
 Start date/time: 10/20/2004 9:54:47  
 End date/time: 10/20/2004 10:11:28  
 Total Time: 0:16:41

Reading #	pH	ORP	DO	Cond	Turb	Temp							
	[pH]	[mV]	[mg/L]	[uS/cm]	[NTU]	[C]							
4	6.46	0	-88.46	-0.09	0.35	1610.25	3.72	15.04	3.08	16.44	-0.02	10:08:50	
3	6.46	0	-88.67	-0.22	0.34	-0.01	1607.59	-2.66	11.29	-3.76	16.45	0.01	10:09:26
2	6.46	0	-89.01	-0.34	0.32	-0.02	1601.25	-6.35	10.2	-1.09	16.41	-0.03	10:10:03
1	6.46	0	-89.14	-0.13	0.31	-0.01	1604.95	3.7	10.38	0.18	16.44	0.02	10:10:38
0	6.46	0	-89.36	-0.22	0.31	0	1609.73	4.78	9.65	-0.74	16.47	0.03	10:11:14

pH Min: 6.46  
 pH Max: 6.46  
 ORP Min: -89.36  
 ORP Max: -88.46  
 DO Min: 0.31  
 DO Max: 0.35  
 Cond Min: 1601.25

Cond Max: 1610.25  
Turb Min: 9.65  
Turb Max: 15.04  
Temp Min: 16.41  
Temp Max: 16.47

Notes:

Device Record:

In-Situ Inc. Troll 9000 Profiler XP  
Report generated: 11/22/2004 14:40:34  
Report from file: ...\\Hartford Working Group-15-03095.15.003-HMW-26-10-20-2004.flo.bin  
Win-Situ Version 4.51  
Serial number: 30627  
Firmware Version 1.39  
Unit name: MP Troll 9000  
Test name: LowFlow  
Test defined on: 10/20/2004 9:54:47  
Test started on: 10/20/2004 9:54:47  
Test stopped on: N/A N/A

Data gathered using Event testing

Time between data points: 0.0 Seconds  
Time between default storages: 0.0 Seconds  
Monitoring data on channel [1]  
Data stored if delta value exceeds: 0 Fahrenheit  
Number of data samples: 28  
TOTAL DATA SAMPLES 28

Channel number [1]

Measurement type: Temperature  
Channel name:

Channel number [3]

Measurement type: Barometric Pressure  
Channel name:

Channel number [4]

Measurement type: Turbidity  
Channel name:

Channel number [5]

Measurement type: Battery Voltage  
Channel name:

Channel number [11]

Measurement type: ORP  
Channel name:

Channel number [12]

Measurement type: pH  
Channel name:

Channel number [25]

Measurement type:

Channel name:

Dissolved Oxygen

Channel number [45]

Measurement type:

Channel name:

Conductivity, Low Range

Date	Time	ET (sec)	Chan[1] Temp F	Chan[3] Barometric Inches Hg	Chan[4] Turbidity NTU	Chan[5] Battery Volts	Chan[11] ORP millivolts	Chan[12] pH pH	Chan[25] Clark DO ug/L	Chan[45] Conductivity mS/cm
10/20/2004	9:54:47	0	62.91	29.529	83.1	2.696	41	6.42	9272	1546.67
10/20/2004	9:55:24	37	61.85	29.529	90	2.696	-43	6.3	6342	1582.91
10/20/2004	9:56:01	74	61.71	29.53	149.1	2.696	-62	6.35	3071	1591.2
10/20/2004	9:56:37	110	61.6	29.53	114.3	2.696	-70	6.39	1670	1572.7
10/20/2004	9:57:14	147	61.65	29.531	139.1	2.696	-75	6.4	1034	1580.37
10/20/2004	9:57:51	184	61.64	29.53	135.1	2.696	-78	6.42	745	1574.75
10/20/2004	9:58:28	221	61.59	29.53	125.7	2.696	-80	6.42	625	1574.25
10/20/2004	9:59:04	257	62.11	29.531	133.8	2.696	-80	6.42	870	1576.29
10/20/2004	9:59:41	294	61.83	29.531	139.2	2.696	-82	6.43	1143	1586.58
10/20/2004	10:00:18	331	61.74	29.531	111.2	2.696	-83	6.44	1067	1591.25
10/20/2004	10:00:55	368	61.61	29.531	84.4	2.696	-84	6.44	883	1605.96
10/20/2004	10:01:31	404	61.65	29.532	67	2.696	-85	6.44	726	1614.49
10/20/2004	10:02:08	441	61.63	29.531	44.4	2.696	-86	6.45	637	1609.15
10/20/2004	10:02:45	478	61.58	29.532	36.9	2.696	-86	6.45	558	1614.49
10/20/2004	10:03:20	513	61.6	29.532	27.3	2.696	-86	6.45	499	1617.18
10/20/2004	10:03:57	550	61.52	29.532	22	2.696	-87	6.45	460	1607.03
10/20/2004	10:04:33	586	61.62	29.532	26.3	2.696	-87	6.45	428	1604.91
10/20/2004	10:05:10	623	61.59	29.531	17.8	2.696	-88	6.45	392	1606.51
10/20/2004	10:05:47	660	61.5	29.532	15.8	2.696	-88	6.45	380	1608.1
10/20/2004	10:06:24	697	61.51	29.532	14.8	2.696	-88	6.45	366	1601.23
10/20/2004	10:07:01	734	61.4	29.532	15.3	2.696	-88	6.46	358	1591.28
10/20/2004	10:07:37	770	61.54	29.533	13.3	2.696	-88	6.46	348	1594.94
10/20/2004	10:08:14	807	61.61	29.533	12	2.696	-88	6.46	356	1606.53
10/20/2004	10:08:50	843	61.59	29.533	15	2.696	-88	6.46	352	1610.25
10/20/2004	10:09:26	879	61.6	29.533	11.3	2.696	-89	6.46	338	1607.59
10/20/2004	10:10:03	916	61.54	29.533	10.2	2.696	-89	6.46	321	1601.25
10/20/2004	10:10:38	951	61.58	29.533	10.4	2.696	-89	6.46	307	1604.95
10/20/2004	10:11:14	987	61.64	29.533	9.6	2.696	-89	6.46	306	1609.73

**INSTRUCTIONS:** This is the raw data export format from the Win-Situ Low Flow Cell data file:Hartford Working Group-15-03095.15.003-HMW-27-10-20-2004.flo To Generate a report insert a new sheet based on a sheet template. See 'Sheet Template' and 'Insert a new sheet that's based on a custom template' in Excel help. An example template, InSituLowFlow.xls, is provided by the Win-Situ Installation. You may copy this template from the templates subfolder in the folder where Win-Situ is installed to your Excel templates directory.

Operator Name: NORMAN BOLIVAR  
 Company Name: CLAYTON GROUP SERVICES  
 Project Name: Hartford Working Group  
 Site Name: 15-03095.15.003  
 Well ID: HMW-27

pH Sensor:	Installed	Target Value	0.1	[pH]	Target Percent	0	[%]
ORP Sensor:	Installed	Target Value	200	[mV]	Target Percent	0	[%]
DO Sensor:	Installed	Target Value	1	[mg/L]	Target Percent	0	[%]
Cond Sensor:	Installed	Target Value	200	[uS/cm]	Target Percent	0	[%]
Turb Sensor:	Installed	Target Value	200	[NTU]	Target Percent	0	[%]

Pump Model/Type: BLADDER  
 Tubing Type: PVC  
 Tubing Diam: 0.25 [in]  
 Tubing Length: 39 [ft]  
 Well Depth: 40 [ft]  
 Well Diam: 2 [in]  
 Screen Len: 180 [in]  
 Screen Depth: 25 [ft]  
 Pump Inlet Depth: 0 [in]  
 Depth to Water: 30.74 [ft]  
 Pump Level (TOC): 32.5 [ft]  
 Final Pumping Rate: 200 [mL/min]  
 Stable Draw Down: 0 [in]  
 Total Volume Formula: Volume = cup (200 mL) + tubing (1.9 mL) - pH\_ORP (16 mL) - DO (14 mL) - Cond (13 mL) - Turb (40 mL)  
 Calculated Total Volume: 118.91 [mL]  
 Actual Total Volume: 118.91 [mL]  
 Calculated Measurement Interval: 36 [sec]  
 Actual Measurement Interval: 36 [sec]  
 Start date/time: 10/20/2004 13:26:55  
 End date/time: 10/20/2004 13:44:20  
 Total Time: 0:17:25

Reading #	pH	Variance	ORP	Variance	DO	Variance	Cond	Variance	Turb	Variance	Temp	Variance	Time
4	6.47	0	53.95	-0.21	0.26	-0.02	1254.05	-0.65	20.07	-1.72	16.78	0	13:41:30
3	6.47	0	53.52	-0.43	0.25	-0.01	1253.08	-0.97	20.2	0.13	16.75	-0.03	13:42:07
2	6.47	0	53.22	-0.3	0.24	-0.01	1255.02	1.94	17.23	-2.97	16.76	0.01	13:42:44
1	6.47	0	53.01	-0.21	0.22	-0.02	1252.75	-2.26	17.79	0.56	16.71	-0.05	13:43:20
0	6.47	0	52.62	-0.39	0.21	0	1251.14	-1.61	17.51	-0.28	16.73	0.02	13:43:57

pH Min: 6.47  
 pH Max: 6.47  
 ORP Min: 52.62  
 ORP Max: 53.95  
 DO Min: 0.21  
 DO Max: 0.26

Cond Min: 1251.14  
Cond Max: 1255.02  
Turb Min: 17.23  
Turb Max: 20.2  
Temp Min: 16.71  
Temp Max: 16.78  
Notes:  
Device Record:  
In-Situ Inc. Troll 9000 Profiler XP  
Report generated: 11/22/2004 14:41:22  
Report from file: ...\\Hartford Working Group-15-03095.15.003-HMW-27-10-20-2004.flo.bin  
Win-Situ Version 4.51  
Serial number: 30627  
Firmware Version 1.39  
Unit name: MP Troll 9000  
Test name: LowFlow  
Test defined on: 10/20/2004 13:26:55  
Test started on: 10/20/2004 13:26:55  
Test stopped on: N/A N/A

Data gathered using Event testing

Time between data points: 0.0 Seconds  
Time between default storages: 0.0 Seconds  
Monitoring data on channel [1]  
Data stored if delta value exceeds: 0 Fahrenheit  
Number of data samples: 29  
TOTAL DATA SAMPLES 29

Channel number [1]  
Measurement type: Temperature  
Channel name:

Channel number [3]  
Measurement type: Barometric Pressure  
Channel name:

Channel number [4]  
Measurement type: Turbidity  
Channel name:

Channel number [5]  
Measurement type: Battery Voltage  
Channel name:

Channel number [11]  
Measurement type: ORP  
Channel name:

Channel number [12]  
Measurement type: pH  
Channel name:

Channel number [25]

Measurement type:

Dissolved Oxygen

Channel name:

Channel number [45]

Measurement type:

Conductivity, Low Range

Channel name:

Date	Time	ET (sec)	Chan[1] Temp F	Chan[3] Barometric Inches Hg	Chan[4] Turbidity NTU	Chan[5] Battery Volts	Chan[11] ORP millivolts	Chan[12] pH pH	Chan[25] Clark DO ug/L	Chan[45] Conductivity mS/cm
10/20/2004	13:26:55	0	65.43	29.495	57	2.696	39	7.68	9371	1088.99
10/20/2004	13:27:32	37	63.29	29.496	73.3	2.696	49	6.85	6584	1256.94
10/20/2004	13:28:08	73	62.74	29.496	72.5	2.696	53	6.65	3764	1265.43
10/20/2004	13:28:44	109	62.61	29.495	70	2.696	54	6.57	2579	1266.42
10/20/2004	13:29:21	146	62.44	29.495	61.2	2.696	56	6.53	1761	1264.78
10/20/2004	13:29:57	182	62.44	29.495	60.4	2.696	57	6.51	1313	1263.79
10/20/2004	13:30:32	217	62.39	29.494	46.7	2.696	58	6.49	1018	1262.48
10/20/2004	13:31:09	254	62.34	29.494	48.3	2.696	58	6.48	836	1261.83
10/20/2004	13:31:45	290	62.37	29.493	42	2.696	58	6.48	731	1261.18
10/20/2004	13:32:22	327	62.33	29.493	35.9	2.696	58	6.47	666	1260.52
10/20/2004	13:32:58	363	62.33	29.493	31.4	2.696	58	6.47	605	1258.25
10/20/2004	13:33:35	400	62.33	29.492	33.7	2.696	58	6.47	579	1259.23
10/20/2004	13:34:12	437	62.27	29.492	36	2.696	58	6.47	488	1259.55
10/20/2004	13:34:49	474	62.3	29.492	33.9	2.696	57	6.47	444	1258.25
10/20/2004	13:35:25	510	62.29	29.492	28.4	2.696	57	6.47	417	1255.33
10/20/2004	13:36:02	547	62.26	29.492	27	2.696	57	6.47	405	1256.31
10/20/2004	13:36:38	583	62.29	29.491	26.8	2.696	57	6.47	374	1256.96
10/20/2004	13:37:14	619	62.18	29.492	26.4	2.696	56	6.47	362	1255.34
10/20/2004	13:37:50	655	62.22	29.492	29.4	2.696	56	6.47	348	1255.34
10/20/2004	13:38:26	691	62.22	29.493	24.2	2.696	56	6.47	331	1257.28
10/20/2004	13:39:02	727	62.2	29.494	23.8	2.696	55	6.47	322	1255.01
10/20/2004	13:39:41	766	62.21	29.493	21.5	2.696	55	6.47	309	1253.72
10/20/2004	13:40:18	803	62.18	29.493	25.3	2.696	54	6.47	291	1255.34
10/20/2004	13:40:54	839	62.2	29.493	21.8	2.696	54	6.47	278	1254.69
10/20/2004	13:41:30	875	62.2	29.493	20.1	2.696	54	6.47	260	1254.05
10/20/2004	13:42:07	912	62.16	29.493	20.2	2.696	54	6.47	252	1253.08
10/20/2004	13:42:44	949	62.17	29.493	17.2	2.696	53	6.47	239	1255.02
10/20/2004	13:43:20	985	62.08	29.494	17.8	2.696	53	6.47	217	1252.75
10/20/2004	13:43:57	1022	62.11	29.493	17.5	2.696	53	6.47	213	1251.14

INSTRUCTIONS: This is the raw data export format from the Win-Situ Low Flow Cell data file:Hartford Working Group-15-03095.15.003-HMW-28-10-20-2004.flo To Generate a report insert a new sheet based on a sheet template. See 'Sheet Template' and 'Insert a new sheet that's based on a custom template' in Excel help. An example template, InSituLowFlow.xls, is provided by the Win-Situ Installation. You may copy this template from the templates subfolder in the folder where Win-Situ is installed to your Excel templates directory.

Operator Name: NORMAN BOLIVAR  
 Company Name: CLAYTON GROUP SERVICES  
 Project Name: Hartford Working Group  
 Site Name: 15-03095.15.003  
 Well ID: HMW-28

pH Sensor:	Installed	Target Value	0.1	[pH]	Target Percent	0	[%]
ORP Sensor:	Installed	Target Value	200	[mV]	Target Percent	0	[%]
DO Sensor:	Installed	Target Value	1	[mg/L]	Target Percent	0	[%]
Cond Sensor:	Installed	Target Value	200	[uS/cm]	Target Percent	0	[%]
Turb Sensor:	Installed	Target Value	200	[NTU]	Target Percent	0	[%]

Pump Model/Type: BLADDER

Tubing Type:	PVC
Tubing Diam:	0.25 [in]
Tubing Length:	39 [ft]
Well Depth:	40 [ft]
Well Diam:	2 [in]
Screen Len:	160 [in]
Screen Depth:	25 [ft]
Pump Inlet Depth:	0 [in]
Depth to Water:	30.84 [ft]
Pump Level (TOC):	32.5 [ft]
Final Pumping Rate:	200 [mL/min]
Stable Draw Down:	0 [in]

Total Volume Formula: Volume = cup (200 mL) + tubing (1.9 mL) - pH\_ORP (16 mL) - DO (14 mL) - Cond (13 mL) - Turb (40 mL)

Calculated Total Volume:	118.91 [mL]
Actual Total Volume:	118.91 [mL]
Calculated Measurement Interval:	36 [sec]
Actual Measurement Interval:	36 [sec]
Start date/time:	10/20/2004 16:28:18
End date/time:	10/20/2004 16:37:48
Total Time:	0:09:30

Reading #	pH	Variance	ORP	Variance	DO	Variance	Cond	Variance	Turb	Variance	Temp	Variance	Time
4	6.54	0	86	1.07	1.12	-0.05	1005.18	0	27.67	-4.32	16.56	0.01	16:34:58
3	6.54	0	86.68	0.68	1.12	0	1005.59	0.42	31.8	4.13	16.55	-0.01	16:35:35
2	6.54	0	87.54	0.86	1.09	-0.03	1005.8	0.21	30.3	-1.5	16.55	0	16:36:12
1	6.54	0	88.52	0.98	0.99	-0.09	1006.22	0.42	30.17	-0.13	16.54	0	16:36:49
0	6.54	0	89.08	0.56	0.96	-0.04	1006.43	0.21	30.48	0.31	16.55	0	16:37:25

pH Min:	6.54
pH Max:	6.54
ORP Min:	86
ORP Max:	89.08
DO Min:	0.96
DO Max:	1.12

Cond Min: 1005.18  
Cond Max: 1006.43  
Turb Min: 27.67  
Turb Max: 31.8  
Temp Min: 16.54  
Temp Max: 16.56

Notes:

Device Record:  
In-Situ Inc. Troll 9000 Profiler XP  
Report generated: 11/22/2004 14:42:21  
Report from file: ...\\Hartford Working Group-15-03095.15.003-HMW-28-10-20-2004.flo.bin  
Win-Situ Version 4.51  
Serial number: 30627  
Firmware Version 1.39  
Unit name: MP Troll 9000  
Test name: LowFlow  
Test defined on: 10/20/2004 16:28:18  
Test started on: 10/20/2004 16:28:18  
Test stopped on: N/A N/A

Data gathered using Event testing

Time between data points: 0.0 seconds  
Time between default storages: 0.0 seconds  
Monitoring data on channel [1]  
Data stored if delta value exceeds: 0 Fahrenheit  
Number of data samples: 16  
TOTAL DATA SAMPLES 16

Channel number [1]  
Measurement type: Temperature  
Channel name:

Channel number [3]  
Measurement type: Barometric Pressure  
Channel name:

Channel number [4]  
Measurement type: Turbidity  
Channel name:

Channel number [5]  
Measurement type: Battery Voltage  
Channel name:

Channel number [11]  
Measurement type: ORP  
Channel name:

Channel number [12]  
Measurement type: pH  
Channel name:

Channel number [25]

Measurement type:

Channel name:

Dissolved Oxygen

Channel number [45]

Measurement type:

Channel name:

Conductivity, Low Range

Date	Time	ET (sec)	Chan[1] Temp F	Chan[3] Barometric Inches Hg	Chan[4] Turbidity NTU	Chan[5] Battery Volts	Chan[11] ORP millivolts	Chan[12] pH	Chan[25] Clark DO ug/L	Chan[45] Conductivity mS/cm
10/20/2004	16:28:18	0	64.59	29.482	5.1	2.696	55	7.82	8789	563.77
10/20/2004	16:28:54	36	63.86	29.482	13.5	2.696	66	7.07	7026	869.38
10/20/2004	16:29:31	73	62.89	29.483	16	2.696	72	6.72	4301	985.63
10/20/2004	16:30:07	109	62.53	29.483	18.9	2.696	75	6.6	2633	996.12
10/20/2004	16:30:43	145	62.28	29.484	22.1	2.696	78	6.57	1914	1004.76
10/20/2004	16:31:20	182	62.14	29.483	24.1	2.696	79	6.56	1567	1006.84
10/20/2004	16:31:57	219	61.98	29.483	23.9	2.696	81	6.55	1429	1004.55
10/20/2004	16:32:33	255	61.86	29.483	29.1	2.696	82	6.55	1345	1004.34
10/20/2004	16:33:10	292	61.87	29.483	28.9	2.696	83	6.54	1270	1005.17
10/20/2004	16:33:47	329	61.84	29.483	29.2	2.696	84	6.54	1173	1004.97
10/20/2004	16:34:22	364	61.79	29.484	32	2.696	85	6.54	1166	1005.18
10/20/2004	16:34:58	400	61.8	29.483	27.7	2.696	86	6.54	1117	1005.18
10/20/2004	16:35:35	437	61.79	29.483	31.8	2.696	87	6.54	1117	1005.59
10/20/2004	16:36:12	474	61.79	29.483	30.3	2.696	88	6.54	1086	1005.8
10/20/2004	16:36:49	511	61.78	29.483	30.2	2.696	89	6.54	993	1006.22
10/20/2004	16:37:25	547	61.78	29.483	30.5	2.696	89	6.54	957	1006.43

INSTRUCTIONS: This is the raw data export format from the Win-Situ Low Flow Cell data file:Hartford Working Group-15-03095.15.003-HMW-29-10-20-2004.flo To Generate a report insert a new sheet based on a sheet template. See 'Sheet Template' and 'Insert a new sheet that's based on a custom template' in Excel help. An example template, InSituLowFlow.xlsx, is provided by the Win-Situ Installation. You may copy this template from the templates subfolder in the folder where Win-Situ is installed to your Excel templates directory.

Operator Name: NORMAN BOLIVAR  
 Company Name: CLAYTON GROUP SERVICES  
 Project Name: Hartford Working Group  
 Site Name: 15-03095.15.003  
 Well ID: HMW-29

pH Sensor:	Installed	Target Value	0.1	[pH]	Target Percent	0	[%]
ORP Sensor:	Installed	Target Value	200	[mV]	Target Percent	0	[%]
DO Sensor:	Installed	Target Value	1	[mg/L]	Target Percent	0	[%]
Cond Sensor:	Installed	Target Value	200	[µS/cm]	Target Percent	0	[%]
Turb Sensor:	Installed	Target Value	200	[NTU]	Target Percent	0	[%]

Pump Model/Type: BLADDER  
 Tubing Type: PVC  
 Tubing Diam: 0.25 [in]  
 Tubing Length: 39 [ft]  
 Well Depth: 40 [ft]  
 Well Diam: 2 [in]  
 Screen Len: 160 [in]  
 Screen Depth: 25 [ft]  
 Pump Inlet Depth: 0 [in]  
 Depth to Water: 29.19 [ft]  
 Pump Level (TOC): 32.5 [ft]  
 Final Pumping Rate: 200 [mL/min]  
 Stable Draw Down: 0 [in]  
 Total Volume Formula: Volume = cup (200 mL) + tubing (1.9 mL) - pH\_ORP (16 mL) - DO (14 mL) - Cond (13 mL) - Turb (40 mL)  
 Calculated Total Volume: 118.91 [mL]  
 Actual Total Volume: 118.91 [mL]  
 Calculated Measurement Interval: 36 [sec]  
 Actual Measurement Interval: 36 [sec]  
 Start date/time: 10/20/2004 18:15:33  
 End date/time: 10/20/2004 18:28:17  
 Total Time: 0:12:44

Reading #	pH	Variance	ORP □[mV]	Variance	DO □[mg/L]	Variance	Cond □[µS/cm]	Variance	Turb □[NTU]	Variance	Temp □[C]	Variance	Time
4	6.67	0	-10.47	-2.48	6.2	-0.13	874	1.26	260.15	39.41	15.72	0	18:25:18
3	6.67	0	-13.04	-2.57	6.06	-0.14	875.73	1.73	280.04	19.9	15.7	-0.01	18:25:56
2	6.67	0	-15.23	-2.18	5.95	-0.11	875.89	0.16	309.97	29.93	15.71	0.01	18:26:32
1	6.67	0	-17.58	-2.36	2.96	-2.99	876.2	0.32	308.52	-1.45	15.71	0	18:27:09
0	6.67	0	-19.77	-2.18	1.27	-1.69	878.26	2.06	328.76	20.24	15.71	0	18:27:44

pH Min: 6.67  
 pH Max: 6.67  
 ORP Min: -19.77  
 ORP Max: -10.47  
 DO Min: 1.27  
 DO Max: 6.2

Cond Min: 874  
Cond Max: 878.26  
Turb Min: 260.15  
Turb Max: 328.76  
Temp Min: 15.7  
Temp Max: 15.72  
Notes:  
Device Record:  
In-Situ Inc.  
Report generated: Troll 9000 Profiler XP  
11/22/2004 14:43:02  
Report from file: ...\\Hartford Working Group-15-03095.15.003-HMW-29-10-20-2004.flo.bin  
Win-Situ Version 4.51  
Serial number: 30627  
Firmware Version 1.39  
Unit name: MP Troll 9000  
Test name: LowFlow  
Test defined on: 10/20/2004 18:15:33  
Test started on: 10/20/2004 18:15:33  
Test stopped on: N/A N/A

Data gathered using Event testing

Time between data points: 0.0 seconds  
Time between default storages: 0.0 seconds  
Monitoring data on channel [1]  
Data stored if delta value exceeds: 0 Fahrenheit  
Number of data samples: 21  
TOTAL DATA SAMPLES 21

Channel number [1]  
Measurement type: Temperature  
Channel name:

Channel number [3]  
Measurement type: Barometric Pressure  
Channel name:

Channel number [4]  
Measurement type: Turbidity  
Channel name:

Channel number [5]  
Measurement type: Battery Voltage  
Channel name:

Channel number [11]  
Measurement type: ORP  
Channel name:

Channel number [12]  
Measurement type: pH  
Channel name:

Channel number [25]

Measurement type:

Channel name:

Dissolved Oxygen

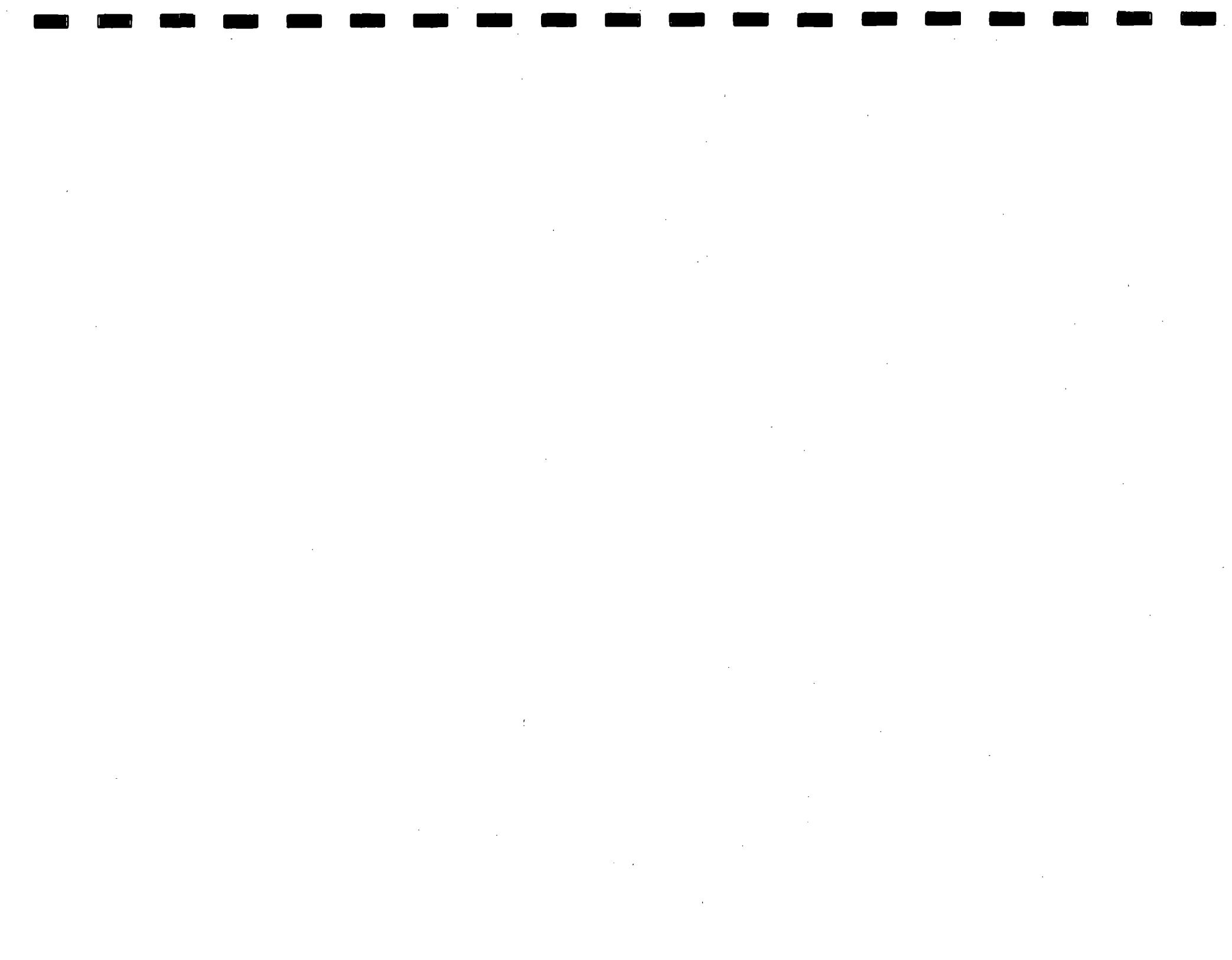
Channel number [45]

Measurement type:

Channel name:

Conductivity, Low Range

Date	Time	ET (sec)	Chan[1] Temp F	Chan[3] Barometric Inches Hg	Chan[4] Turbidity NTU	Chan[5] Battery Volts	Chan[11] ORP millivolts	Chan[12] pH	Chan[25] Clark DO ug/L	Chan[45] Conductivity mS/cm
10/20/2004	18:15:33	0	62.26	29.489	169.7	2.683	81	7	7773	873.66
10/20/2004	18:16:09	36	60.91	29.49	214.3	2.683	63	6.81	7250	865.73
10/20/2004	18:16:46	73	60.57	29.491	237.3	2.683	52	6.76	7467	861.44
10/20/2004	18:17:21	108	60.5	29.491	210.4	2.683	43	6.73	7418	860.07
10/20/2004	18:17:58	145	60.46	29.491	195.8	2.683	36	6.71	7289	858.25
10/20/2004	18:18:38	185	60.42	29.492	190.3	2.683	30	6.71	7151	859.62
10/20/2004	18:19:14	221	60.41	29.491	204.5	2.683	25	6.69	7063	859.92
10/20/2004	18:19:51	258	60.37	29.492	208.2	2.683	21	6.69	6980	861.14
10/20/2004	18:20:26	293	60.37	29.493	213.9	2.683	16	6.69	6905	862.21
10/20/2004	18:21:03	330	60.33	29.493	206.3	2.683	12	6.68	6831	864.36
10/20/2004	18:21:39	366	60.35	29.493	230.4	2.683	8	6.68	6757	864.98
10/20/2004	18:22:16	403	60.35	29.493	207.9	2.683	4	6.68	6682	866.52
10/20/2004	18:22:52	439	60.31	29.494	230.3	2.683	1	6.68	6607	868.53
10/20/2004	18:23:29	476	60.32	29.494	237.3	2.683	-2	6.68	6526	869.31
10/20/2004	18:24:05	512	60.31	29.495	239.7	2.683	-5	6.67	6463	869.77
10/20/2004	18:24:42	549	60.29	29.495	220.7	2.683	-8	6.68	6332	872.74
10/20/2004	18:25:18	585	60.29	29.496	260.1	2.683	-10	6.67	6197	874
10/20/2004	18:25:56	623	60.26	29.496	280	2.683	-13	6.67	6057	875.73
10/20/2004	18:26:32	659	60.28	29.496	310	2.683	-15	6.67	5952	875.89
10/20/2004	18:27:09	696	60.28	29.497	308.5	2.683	-18	6.67	2959	876.2
10/20/2004	18:27:44	731	60.27	29.498	328.8	2.683	-20	6.67	1272	878.26



Appendix C

**Appendix C**



## **APPENDIX C**

### **LABORATORY ANALYTICAL REPORT OCTOBER 2004 SAMPLING EVENT**



# TEKLAB, INC.

5445 HORSESHOE LAKE ROAD  
COLLINSVILLE, ILLINOIS 62234

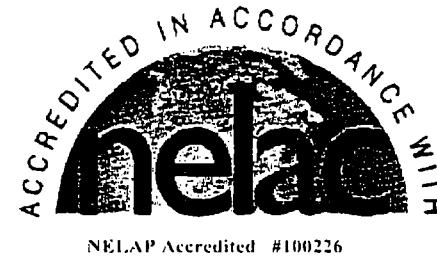
ENVIRONMENTAL TESTING LABORATORY

TEL: 618-344-1004

FAX: 618-344-1005

November 04, 2004

Ken Comire  
Clayton Group Services  
3140 Finley Road  
Downers Grove, IL 60515  
TEL: (630) 795-3203  
FAX: (630) 795-1130



RE: 15-03095.15-003

OrderNo. 04100498

Dear Ken Comire:

TEKLAB, INC received 8 samples on 10/21/04 10:40:00 AM for the analysis presented in the following report.

Samples are analyzed on an as received basis unless otherwise requested and documented. The sample results contained in this report relate only to the requested analytes of interest that have been tested. IL ELAP and NELAP accredited fields of testing are indicated by the letters NELAP under the Certification column

All quality control criteria applicable to the test methods employed for this project have been satisfactorily met and are in accordance with NELAP/Part 186 except where noted in the Case Narrative. The following report shall not be reproduced, except in full, without the written approval of Teklab, Inc.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

A handwritten signature in black ink, appearing to read "Michael L. Austin".

Michael L. Austin  
Director of Operations

# TEKLAB, INC.

5445 HORSESHOE LAKE ROAD  
COLLINSVILLE, ILLINOIS 62234

ENVIRONMENTAL TESTING LABORATORY

TEL: 618-344-1004  
FAX: 618-344-1005

Client: Clayton Group Services  
Project: 15-03095.15-003  
LabOrder: 04100498  
Report Date: November 04, 2004

## CASE NARRATIVE

Samples collected 10/19/04 and 10/20/04 @ 10:20 a.m. did not meet hold time requirements for pH analysis. Additional sodium hydroxide preservative was needed for HMW-25, HMW-26, HMW-28, and Dup-001 upon arrival at the laboratory.

Analytical Comments for METHOD I\_SUL\_M\_AT, SAMPLE 04100498-004E, 005E: Elevated reporting limit due to matrix interference.

Analytical Comments for METHOD SV\_8270S\_W, SAMPLE LCSDUP-22462: Batch precision based on LCS/LCSDUP data..

Analytical Comments for METHOD SV\_DIOXANE\_S, SAMPLE LCS-102604: LCS recovered above QC limits, samples non-detect.

Analytical Comments for METHOD I\_SO4\_S\_AT, SAMPLE 04100498-007B: Insufficient sample to run MSD.

Qualifiers		
DF - Dilution Factor	B - Analyte detected in the associated Method Blank	E - Value above quantitation range
RL - Reporting Limit	J - Analyte detected below reporting limits	H - Holding time exceeded
ND - Not Detected at the Reporting Limit	R - RPD outside accepted recovery limits	D - Diluted out of sample
Surr - Surrogate Standard added by lab	S - Spike Recovery outside accepted recovery limits	MI - Matrix interference
TNTC - Too numerous to count	* - Value exceeds Maximum Contaminant Level	DNI - Did Not Ignite
IDPH - Illinois Department of Public Health	NELAP - IL ELAP and NELAP Accredited Field of Testing	

# TEKLAB, INC.

5445 HORSESHOE LAKE ROAD  
COLLINSVILLE, ILLINOIS 62234

ENVIRONMENTAL TESTING LABORATORY

TEL: 618-344-1004  
FAX: 618-344-1005

## Laboratory Results

**CLIENT:** Clayton Group Services  
**WorkOrder:** 04100498  
**Lab ID:** 04100498-001  
**Report Date:** 04-Nov-04

**Client Project:** 15-03095.15-003  
**Client Sample ID:** HMW-25/041019  
**Collection Date:** 10/19/04 3:55:00 PM  
**Matrix:** GROUNDWATER

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Analyst	
<b><u>STANDARD METHODS 18TH ED. 2320 B</u></b>									
Alkalinity, Total (as CaCO <sub>3</sub> )	NELAP	0		496	mg/L	1	10/25/04	DLY	
<b><u>STANDARD METHODS 18TH ED. 2340 C</u></b>									
Hardness, as (CaCO <sub>3</sub> )	NELAP	5		540	mg/L	1	10/25/04	JLL	
<b><u>STANDARD METHODS 18TH ED. 2540 C (TOTAL)</u></b>									
Total Dissolved Solids	NELAP	20		714	mg/L	1	10/22/04	JRS	
<b><u>STANDARD METHODS 18TH ED. 2540 D</u></b>									
Total Suspended Solids	NELAP	6		9	mg/L	1	10/22/04	JRS	
<b><u>STANDARD METHODS 18TH ED. 4500-S D (TOTAL)</u></b>									
Sulfide, Total - Colorimetric	NELAP	0.05	J	0.02	mg/L	1	10/25/04 11:50:00 AM	NNH	
<b><u>STANDARD METHODS 18TH ED. 5220 D (TOTAL)</u></b>									
Chemical Oxygen Demand	NELAP	20	J	16	mg/L	1	10/22/04	JLR	
<b><u>SW-846 9012A (TOTAL)</u></b>									
Cyanide		0.050		< 0.050	mg/L	1	10/21/04 7:30:15 PM	SMR	
<b><u>SW-846 3005A, 6010B. METALS BY ICP (TOTAL)</u></b>									
Barium	NELAP	0.0050		0.300	mg/L	1	11/1/04 10:20:34 AM	SAM	
Beryllium	NELAP	0.0010		< 0.0010	mg/L	1	11/1/04 10:20:34 AM	SAM	
Cadmium	NELAP	0.0020	J	0.0004	mg/L	1	11/1/04 10:20:34 AM	SAM	
Chromium	NELAP	0.0100		< 0.0100	mg/L	1	11/1/04 10:20:34 AM	SAM	
Cobalt	NELAP	0.0100		< 0.0100	mg/L	1	11/1/04 10:20:34 AM	SAM	
Nickel	NELAP	0.0100		0.0149	mg/L	1	11/1/04 10:20:34 AM	SAM	
Silver	NELAP	0.0100		< 0.0100	mg/L	1	11/1/04 10:20:34 AM	SAM	
Vanadium	NELAP	0.0100		< 0.0100	mg/L	1	11/1/04 10:20:34 AM	SAM	
Zinc	NELAP	0.0100		0.171	mg/L	1	11/1/04 10:20:34 AM	SAM	
<b><u>SW-846 3020A. METALS BY GFAA (TOTAL)</u></b>									
Antimony	7041	NELAP	0.0050	< 0.0050	mg/L	1	10/29/04	JMF	
Arsenic	7060A	NELAP	0.0030	< 0.0030	mg/L	1	10/26/04	SRS	
Lead	7421	NELAP	0.0020	J	0.0009	mg/L	1	10/27/04	SRS
Selenium	7740	NELAP	0.0060	< 0.0060	mg/L	1	10/28/04	SRS	
<b><u>SW-846 3510C, 8270C. SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS</u></b>									
2,4-Dimethylphenol	NELAP	0.010		ND	mg/L	1	10/26/04 6:59:00 PM	SML	
2,4-Dinitrophenol	NELAP	0.020		ND	mg/L	1	10/26/04 6:59:00 PM	SML	
4-Nitrophenol	NELAP	0.020		ND	mg/L	1	10/26/04 6:59:00 PM	SML	
Bis(2-ethylhexyl)phthalate	NELAP	0.006		ND	mg/L	1	10/26/04 6:59:00 PM	SML	
Di-n-butyl phthalate	NELAP	0.010		ND	mg/L	1	10/26/04 6:59:00 PM	SML	
Diethyl phthalate	NELAP	0.010		ND	mg/L	1	10/26/04 6:59:00 PM	SML	
Dimethyl phthalate		0.010		ND	mg/L	1	10/26/04 6:59:00 PM	SML	

# TEKLAB, INC.

5445 HORSESHOE LAKE ROAD  
COLLINSVILLE, ILLINOIS 62234

ENVIRONMENTAL TESTING LABORATORY

TEL: 618-344-1004  
FAX: 618-344-1005

## Laboratory Results

**CLIENT:** Clayton Group Services  
**WorkOrder:** 04100498  
**Lab ID:** 04100498-001  
**Report Date:** 04-Nov-04

**Client Project:** 15-03095.15-003  
**Client Sample ID:** HMW-25/041019  
**Collection Date:** 10/19/04 3:55:00 PM  
**Matrix:** GROUNDWATER

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Analyst
m,p-Cresol	NELAP	0.010		ND	mg/L	1	10/26/04 6:59:00 PM	SML
o-Cresol	NELAP	0.010		ND	mg/L	1	10/26/04 6:59:00 PM	SML
Phenol	NELAP	0.005		ND	mg/L	1	10/26/04 6:59:00 PM	SML
Pyrene	NELAP	0.010		ND	mg/L	1	10/26/04 6:59:00 PM	SML
Quinoline		0.005		ND	mg/L	1	10/26/04 6:59:00 PM	SML
Surr: 2,4,6-Tribromophenol		20.3-141		101	%REC	1	10/26/04 6:59:00 PM	SML
Surr: 2-Fluorobiphenyl		49.7-127		92.0	%REC	1	10/26/04 6:59:00 PM	SML
Surr: 2-Fluorophenol		21.6-65.9		54.0	%REC	1	10/26/04 6:59:00 PM	SML
Surr: Nitrobenzene-d5		47.4-116		74.0	%REC	1	10/26/04 6:59:00 PM	SML
Surr: p-Terphenyl-d14		29.7-117		78.0	%REC	1	10/26/04 6:59:00 PM	SML
Surr: Phenol-d5		8.57-54.5		36.0	%REC	1	10/26/04 6:59:00 PM	SML
<b><u>SW-846 3510C. 8310. POLYNUCLEAR AROMATIC HYDROCARBONS BY HPLC</u></b>								
Acenaphthene	NELAP	0.00300		ND	mg/L	1	10/22/04	TDN
Acenaphthylene		0.00150		ND	mg/L	1	10/22/04	TDN
Anthracene	NELAP	0.00030		ND	mg/L	1	10/22/04	TDN
Benzo(a)anthracene	NELAP	0.00009		ND	mg/L	1	10/22/04	TDN
Benzo(a)pyrene	NELAP	0.00012		ND	mg/L	1	10/22/04	TDN
Benzo(b)fluoranthene	NELAP	0.00015		ND	mg/L	1	10/22/04	TDN
Benzo(k)fluoranthene	NELAP	0.00015		ND	mg/L	1	10/22/04	TDN
Chrysene	NELAP	0.00045		ND	mg/L	1	10/22/04	TDN
Dibenz(a,h)anthracene	NELAP	0.00018		ND	mg/L	1	10/22/04	TDN
Fluoranthene	NELAP	0.00090		ND	mg/L	1	10/22/04	TDN
Fluorene	NELAP	0.00030		ND	mg/L	1	10/22/04	TDN
Indeno(1,2,3-cd)pyrene	NELAP	0.00030		ND	mg/L	1	10/22/04	TDN
Naphthalene	NELAP	0.00300		ND	mg/L	1	10/22/04	TDN
Phenanthrene	NELAP	0.00060		ND	mg/L	1	10/22/04	TDN
Pyrene	NELAP	0.00030		ND	mg/L	1	10/22/04	TDN
Surr: Terphenyl-d14		62.5-135		101	%REC	1	10/22/04	TDN
<b><u>SW-846 5030. 8260B. VOLATILE ORGANIC COMPOUNDS BY GC/MS</u></b>								
1,1,1-Trichloroethane	NELAP	5.0		ND	µg/L	1	10/21/04 7:23:00 PM	RLH
1,1-Dichloroethane	NELAP	5.0		ND	µg/L	1	10/21/04 7:23:00 PM	RLH
1,2-Dibromoethane	NELAP	5.0		ND	µg/L	1	10/21/04 7:23:00 PM	RLH
1,2-Dichlorobenzene	NELAP	5.0		ND	µg/L	1	10/21/04 7:23:00 PM	RLH
1,2-Dichloroethane	NELAP	5.0		ND	µg/L	1	10/21/04 7:23:00 PM	RLH
1,3-Dichlorobenzene	NELAP	5.0		ND	µg/L	1	10/21/04 7:23:00 PM	RLH
1,4-Dichlorobenzene	NELAP	5.0		ND	µg/L	1	10/21/04 7:23:00 PM	RLH
2-Butanone	NELAP	25.0		ND	µg/L	1	10/21/04 7:23:00 PM	RLH

# TEKLAB, INC.

5445 HORSESHOE LAKE ROAD  
COLLINSVILLE, ILLINOIS 62234

ENVIRONMENTAL TESTING LABORATORY

TEL: 618-344-1004

FAX: 618-344-1005

## Laboratory Results

**CLIENT:** Clayton Group Services  
**WorkOrder:** 04100498  
**Lab ID:** 04100498-001  
**Report Date:** 04-Nov-04

**Client Project:** 15-03095.15-003  
**Client Sample ID:** HMW-25/041019  
**Collection Date:** 10/19/04 3:55:00 PM  
**Matrix:** GROUNDWATER

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Analyst
Benzene	NELAP	2.0		ND	µg/L	1	10/21/04 7:23:00 PM	RLH
Carbon disulfide	NELAP	5.0		ND	µg/L	1	10/21/04 7:23:00 PM	RLH
Chlorobenzene	NELAP	5.0		ND	µg/L	1	10/21/04 7:23:00 PM	RLH
Chloroform	NELAP	5.0		ND	µg/L	1	10/21/04 7:23:00 PM	RLH
Ethylbenzene	NELAP	5.0		ND	µg/L	1	10/21/04 7:23:00 PM	RLH
Methyl tert-butyl ether	NELAP	2.0		ND	µg/L	1	10/21/04 7:23:00 PM	RLH
Styrene	NELAP	5.0		ND	µg/L	1	10/21/04 7:23:00 PM	RLH
Tetrachloroethene	NELAP	5.0	J	1.4	µg/L	1	10/21/04 7:23:00 PM	RLH
Toluene	NELAP	5.0		ND	µg/L	1	10/21/04 7:23:00 PM	RLH
Trichloroethene	NELAP	5.0		ND	µg/L	1	10/21/04 7:23:00 PM	RLH
Xylenes, Total	NELAP	5.0		ND	µg/L	1	10/21/04 7:23:00 PM	RLH
Sur: 1,2-Dichloroethane-d4		84.3-135		120	%REC	1	10/21/04 7:23:00 PM	RLH
Sur: 4-Bromofluorobenzene		81.1-113.3		100	%REC	1	10/21/04 7:23:00 PM	RLH
Sur: Dibromofluoromethane		88.9-121.2		110	%REC	1	10/21/04 7:23:00 PM	RLH
Sur: Toluene-d8		84.1-114.5		107	%REC	1	10/21/04 7:23:00 PM	RLH
<b><u>SW-846 7470A (TOTAL)</u></b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	10/27/04	JMW
<b><u>SW-846 8015B MODIFIED, 1,4-DIOXANE BY GC/FID</u></b>								
1,4-Dioxane		0.50		ND	mg/L	1	10/25/04 2:02:00 PM	DMH
<b><u>SW-846 9036 (TOTAL)</u></b>								
Sulfate		25		57	mg/L	5	10/25/04 2:15:12 PM	SMR
<b><u>SW-846 9040B</u></b>								
pH	NELAP	1.00	H	6.90		1	10/21/04 2:14:00 PM	SAK
<b><u>SW-846 9251 (TOTAL)</u></b>								
Chloride		20		96	mg/L	20	11/1/04	SMR

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5445 HORSESHOE LAKE ROAD  
COLLINSVILLE, ILLINOIS 62234

ENVIRONMENTAL TESTING LABORATORY

TEL: 618-344-1004  
FAX: 618-344-1005

## Laboratory Results

**CLIENT:** Clayton Group Services  
**WorkOrder:** 04100498  
**Lab ID:** 04100498-002  
**Report Date:** 04-Nov-04

**Client Project:** 15-03095.15-003  
**Client Sample ID:** HMW-26/041020  
**Collection Date:** 10/20/04 10:20:00 AM  
**Matrix:** GROUNDWATER

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Analyst
<b>STANDARD METHODS 18TH ED. 2320 B</b>								
Alkalinity, Total (as CaCO <sub>3</sub> )	NELAP	0		584	mg/L	1	10/25/04	DLY
<b>STANDARD METHODS 18TH ED. 2340 C</b>								
Hardness, as ( CaCO <sub>3</sub> )	NELAP	5		910	mg/L	1	10/25/04	JLL
<b>STANDARD METHODS 18TH ED. 2540 C (TOTAL)</b>								
Total Dissolved Solids	NELAP	20		1210	mg/L	1	10/22/04	JRS
<b>STANDARD METHODS 18TH ED. 2540 D</b>								
Total Suspended Solids	NELAP	6		47	mg/L	1	10/22/04	JRS
<b>STANDARD METHODS 18TH ED. 4500-S-D (TOTAL)</b>								
Sulfide, Total - Colorimetric	NELAP	0.05	J	0.02	mg/L	1	10/25/04 11:50:00 AM	NNH
<b>STANDARD METHODS 18TH ED. 5220 D (TOTAL)</b>								
Chemical Oxygen Demand	NELAP	20	J	16	mg/L	1	10/22/04	JLR
<b>SW-846 9012A (TOTAL)</b>								
Cyanide		0.050		< 0.050	mg/L	1	10/21/04 7:37:24 PM	SMR
<b>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</b>								
Barium	NELAP	0.0050		0.206	mg/L	1	11/1/04 10:25:56 AM	SAM
Beryllium	NELAP	0.0010		< 0.0010	mg/L	1	11/1/04 10:25:56 AM	SAM
Cadmium	NELAP	0.0020		< 0.0020	mg/L	1	11/1/04 10:25:56 AM	SAM
Chromium	NELAP	0.0100		< 0.0100	mg/L	1	11/1/04 10:25:56 AM	SAM
Cobalt	NELAP	0.0100		< 0.0100	mg/L	1	11/1/04 10:25:56 AM	SAM
Nickel	NELAP	0.0100		< 0.0100	mg/L	1	11/1/04 10:25:56 AM	SAM
Silver	NELAP	0.0100		< 0.0100	mg/L	1	11/1/04 10:25:56 AM	SAM
Vanadium	NELAP	0.0100		< 0.0100	mg/L	1	11/1/04 10:25:56 AM	SAM
Zinc	NELAP	0.0100		0.105	mg/L	1	11/1/04 10:25:56 AM	SAM
<b>SW-846 3020A, METALS BY GFAA (TOTAL)</b>								
Antimony	7041	NELAP	0.0050	< 0.0050	mg/L	1	10/29/04	JMF
Arsenic	7060A	NELAP	0.0030	J 0.0020	mg/L	1	10/27/04	SRS
Lead	7421	NELAP	0.0020	J 0.0008	mg/L	1	10/27/04	SRS
Selenium	7740	NELAP	0.0060	< 0.0060	mg/L	1	11/1/04	SRS
<b>SW-846 3510C, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS</b>								
2,4-Dimethylphenol	NELAP	0.010		ND	mg/L	1	10/27/04 11:12:00 AM	SML
2,4-Dinitrophenol	NELAP	0.020		ND	mg/L	1	10/27/04 11:12:00 AM	SML
4-Nitrophenol	NELAP	0.020		ND	mg/L	1	10/27/04 11:12:00 AM	SML
Bis(2-ethylhexyl)phthalate	NELAP	0.006		ND	mg/L	1	10/27/04 11:12:00 AM	SML
Di-n-butyl phthalate	NELAP	0.010		ND	mg/L	1	10/27/04 11:12:00 AM	SML
Diethyl phthalate	NELAP	0.010		ND	mg/L	1	10/27/04 11:12:00 AM	SML
Dimethyl phthalate		0.010		ND	mg/L	1	10/27/04 11:12:00 AM	SML

# TEKLAB, INC.

5445 HORSESHOE LAKE ROAD  
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ENVIRONMENTAL TESTING LABORATORY

TEL: 618-344-1004

FAX: 618-344-1005

## Laboratory Results

**CLIENT:** Clayton Group Services  
**WorkOrder:** 04100498  
**Lab ID:** 04100498-002  
**Report Date:** 04-Nov-04

**Client Project:** 15-03095.15-003  
**Client Sample ID:** HMW-26/041020  
**Collection Date:** 10/20/04 10:20:00 AM  
**Matrix:** GROUNDWATER

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Analyst
m,p-Cresol	NELAP	0.010		ND	mg/L	1	10/27/04 11:12:00 AM	SML
o-Cresol	NELAP	0.010		ND	mg/L	1	10/27/04 11:12:00 AM	SML
Phenol	NELAP	0.005		ND	mg/L	1	10/27/04 11:12:00 AM	SML
Pyrene	NELAP	0.010		ND	mg/L	1	10/27/04 11:12:00 AM	SML
Quinoline		0.005		ND	mg/L	1	10/27/04 11:12:00 AM	SML
Surr: 2,4,6-Tribromophenol		20.3-141		104	%REC	1	10/27/04 11:12:00 AM	SML
Surr: 2-Fluorobiphenyl		49.7-127		90.0	%REC	1	10/27/04 11:12:00 AM	SML
Surr: 2-Fluorophenol		21.6-65.9		53.0	%REC	1	10/27/04 11:12:00 AM	SML
Surr: Nitrobenzene-d5		47.4-116		76.0	%REC	1	10/27/04 11:12:00 AM	SML
Surr: p-Terphenyl-d14		29.7-117		80.0	%REC	1	10/27/04 11:12:00 AM	SML
Surr: Phenol-d5		8.57-54.5		35.0	%REC	1	10/27/04 11:12:00 AM	SML
<b><u>SW-846 3510C, 8310, POLYNUCLEAR AROMATIC HYDROCARBONS BY HPLC</u></b>								
Acenaphthene	NELAP	0.00300		ND	mg/L	1	10/22/04	TDN
Acenaphthylene		0.00150		ND	mg/L	1	10/22/04	TDN
Anthracene	NELAP	0.00030		ND	mg/L	1	10/22/04	TDN
Benzo(a)anthracene	NELAP	0.00009		ND	mg/L	1	10/22/04	TDN
Benzo(a)pyrene	NELAP	0.00012		ND	mg/L	1	10/22/04	TDN
Benzo(b)fluoranthene	NELAP	0.00015		ND	mg/L	1	10/22/04	TDN
Benzo(k)fluoranthene	NELAP	0.00015		ND	mg/L	1	10/22/04	TDN
Chrysene	NELAP	0.00045		ND	mg/L	1	10/22/04	TDN
Dibenzo(a,h)anthracene	NELAP	0.00018		ND	mg/L	1	10/22/04	TDN
Fluoranthene	NELAP	0.00090		ND	mg/L	1	10/22/04	TDN
Fluorene	NELAP	0.00030		ND	mg/L	1	10/22/04	TDN
Indeno(1,2,3-cd)pyrene	NELAP	0.00030		ND	mg/L	1	10/22/04	TDN
Naphthalene	NELAP	0.00300		ND	mg/L	1	10/22/04	TDN
Phenanthrene	NELAP	0.00060		ND	mg/L	1	10/22/04	TDN
Pyrene	NELAP	0.00030		ND	mg/L	1	10/22/04	TDN
Surr: Terphenyl-d14		62.5-135		84.0	%REC	1	10/22/04	TDN
<b><u>SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS</u></b>								
1,1,1-Trichloroethane	NELAP	5.0		ND	µg/L	1	10/21/04 7:54:00 PM	RLH
1,1-Dichloroethane	NELAP	5.0		ND	µg/L	1	10/21/04 7:54:00 PM	RLH
1,2-Dibromoethane	NELAP	5.0		ND	µg/L	1	10/21/04 7:54:00 PM	RLH
1,2-Dichlorobenzene	NELAP	5.0		ND	µg/L	1	10/21/04 7:54:00 PM	RLH
1,2-Dichloroethane	NELAP	5.0		ND	µg/L	1	10/21/04 7:54:00 PM	RLH
1,3-Dichlorobenzene	NELAP	5.0		ND	µg/L	1	10/21/04 7:54:00 PM	RLH
1,4-Dichlorobenzene	NELAP	5.0		ND	µg/L	1	10/21/04 7:54:00 PM	RLH
2-Butanone	NELAP	25.0		ND	µg/L	1	10/21/04 7:54:00 PM	RLH

# TEKLAB, INC.

5445 HORSESHOE LAKE ROAD  
COLLINSVILLE, ILLINOIS 62234

ENVIRONMENTAL TESTING LABORATORY

TEL: 618-344-1004

FAX: 618-344-1005

## Laboratory Results

**CLIENT:** Clayton Group Services  
**WorkOrder:** 04100498  
**Lab ID:** 04100498-002  
**Report Date:** 04-Nov-04

**Client Project:** 15-03095.15-003  
**Client Sample ID:** HMW-26/041020  
**Collection Date:** 10/20/04 10:20:00 AM  
**Matrix:** GROUNDWATER

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Analyst
Benzene	NELAP	2.0		ND	µg/L	1	10/21/04 7:54:00 PM	RLH
Carbon disulfide	NELAP	5.0		ND	µg/L	1	10/21/04 7:54:00 PM	RLH
Chlorobenzene	NELAP	5.0		ND	µg/L	1	10/21/04 7:54:00 PM	RLH
Chloroform	NELAP	5.0		ND	µg/L	1	10/21/04 7:54:00 PM	RLH
Ethylbenzene	NELAP	5.0		ND	µg/L	1	10/21/04 7:54:00 PM	RLH
Methyl tert-butyl ether	NELAP	2.0		ND	µg/L	1	10/21/04 7:54:00 PM	RLH
Styrene	NELAP	5.0		ND	µg/L	1	10/21/04 7:54:00 PM	RLH
Tetrachloroethene	NELAP	5.0		ND	µg/L	1	10/21/04 7:54:00 PM	RLH
Toluene	NELAP	5.0		ND	µg/L	1	10/21/04 7:54:00 PM	RLH
Trichloroethene	NELAP	5.0		ND	µg/L	1	10/21/04 7:54:00 PM	RLH
Xylenes, Total	NELAP	5.0		ND	µg/L	1	10/21/04 7:54:00 PM	RLH
Surr: 1,2-Dichloroethane-d4		84.3-135		121	%REC	1	10/21/04 7:54:00 PM	RLH
Surr: 4-Bromofluorobenzene		81.1-113.3		99.8	%REC	1	10/21/04 7:54:00 PM	RLH
Surr: Dibromofluoromethane		88.9-121.2		109	%REC	1	10/21/04 7:54:00 PM	RLH
Surr: Toluene-d8		84.1-114.5		105	%REC	1	10/21/04 7:54:00 PM	RLH
<b><u>SW-846 7470A (TOTAL)</u></b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	10/27/04	JMW
<b><u>SW-846 8015B MODIFIED, 1,4-DIOXANE BY GC/FID</u></b>								
1,4-Dioxane		0.50		ND	mg/L	1	10/25/04 2:25:00 PM	DMH
<b><u>SW-846 9036 (TOTAL)</u></b>								
Sulfate		50		301	mg/L	10	10/25/04 4:04:07 PM	SMR
<b><u>SW-846 9040B</u></b>								
pH	NELAP	1.00	H	6.72		1	10/21/04 2:18:00 PM	SAK
<b><u>SW-846 9251 (TOTAL)</u></b>								
Chloride		5		92	mg/L	5	10/25/04 5:30:08 PM	SMR

# TEKLAB, INC.

5445 HORSESHOE LAKE ROAD  
COLLINSVILLE, ILLINOIS 62234

ENVIRONMENTAL TESTING LABORATORY

TEL: 618-344-1004

FAX: 618-344-1005

## Laboratory Results

**CLIENT:** Clayton Group Services  
**WorkOrder:** 04100498  
**Lab ID:** 04100498-003  
**Report Date:** 04-Nov-04

**Client Project:** 15-03095.15-003  
**Client Sample ID:** HMW-27/041020  
**Collection Date:** 10/20/04 1:45:00 PM  
**Matrix:** GROUNDWATER

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Analyst	
<b><u>STANDARD METHODS 18TH ED. 2320 B</u></b>									
Alkalinity, Total (as CaCO <sub>3</sub> )	NELAP	0		628	mg/L	1	11/2/04	DLY	
<b><u>STANDARD METHODS 18TH ED. 2340 C</u></b>									
Hardness, as (CaCO <sub>3</sub> )	NELAP	5		830	mg/L	1	10/25/04	JLL	
<b><u>STANDARD METHODS 18TH ED. 2540 C (TOTAL)</u></b>									
Total Dissolved Solids	NELAP	20		928	mg/L	1	10/22/04	JRS	
<b><u>STANDARD METHODS 18TH ED. 2540 D</u></b>									
Total Suspended Solids	NELAP	6		35	mg/L	1	10/22/04	JRS	
<b><u>STANDARD METHODS 18TH ED. 4500-S D (TOTAL)</u></b>									
Sulfide, Total - Colorimetric	NELAP	0.05	J	0.03	mg/L	1	10/25/04 11:50:00 AM	NNH	
<b><u>STANDARD METHODS 18TH ED. 5220 D (TOTAL)</u></b>									
Chemical Oxygen Demand	NELAP	20		23	mg/L	1	10/22/04	JLR	
<b><u>SW-846 9012A (TOTAL)</u></b>									
Cyanide		0.050		< 0.050	mg/L	1	10/21/04 7:40:40 PM	SMR	
<b><u>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</u></b>									
Barium	NELAP	0.0050		0.119	mg/L	1	11/1/04 10:31:17 AM	SAM	
Beryllium	NELAP	0.0010		< 0.0010	mg/L	1	11/1/04 10:31:17 AM	SAM	
Cadmium	NELAP	0.0020	J	0.0006	mg/L	1	11/1/04 10:31:17 AM	SAM	
Chromium	NELAP	0.0100		< 0.0100	mg/L	1	11/1/04 10:31:17 AM	SAM	
Cobalt	NELAP	0.0100	J	0.0095	mg/L	1	11/1/04 10:31:17 AM	SAM	
Nickel	NELAP	0.0100		0.0220	mg/L	1	11/1/04 10:31:17 AM	SAM	
Silver	NELAP	0.0100		< 0.0100	mg/L	1	11/1/04 10:31:17 AM	SAM	
Vanadium	NELAP	0.0100		< 0.0100	mg/L	1	11/1/04 10:31:17 AM	SAM	
Zinc	NELAP	0.0100		0.170	mg/L	1	11/1/04 10:31:17 AM	SAM	
<b><u>SW-846 3020A, METALS BY GFAA (TOTAL)</u></b>									
Antimony	7041	NELAP	0.0050	< 0.0050	mg/L	1	10/29/04	JMF	
Arsenic	7060A	NELAP	0.0030	< 0.0030	mg/L	1	10/27/04	SRS	
Lead	7421	NELAP	0.0020	J	0.0019	mg/L	1	10/29/04	SRS
Selenium	7740	NELAP	0.0060	< 0.0060	mg/L	1	10/28/04	SRS	
<b><u>SW-846 3510C, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS</u></b>									
2,4-Dimethylphenol	NELAP	0.010		ND	mg/L	1	10/27/04 11:50:00 AM	SML	
2,4-Dinitrophenol	NELAP	0.020		ND	mg/L	1	10/27/04 11:50:00 AM	SML	
4-Nitrophenol	NELAP	0.020		ND	mg/L	1	10/27/04 11:50:00 AM	SML	
Bis(2-ethylhexyl)phthalate	NELAP	0.006		ND	mg/L	1	10/27/04 11:50:00 AM	SML	
Di-n-butyl phthalate	NELAP	0.010		ND	mg/L	1	10/27/04 11:50:00 AM	SML	
Diethyl phthalate	NELAP	0.010		ND	mg/L	1	10/27/04 11:50:00 AM	SML	
Dimethyl phthalate		0.010		ND	mg/L	1	10/27/04 11:50:00 AM	SML	

# TEKLAB, INC.

5445 HORSESHOE LAKE ROAD  
COLLINSVILLE, ILLINOIS 62234

ENVIRONMENTAL TESTING LABORATORY

TEL: 618-344-1004  
FAX: 618-344-1005

## Laboratory Results

**CLIENT:** Clayton Group Services  
**WorkOrder:** 04100498  
**Lab ID:** 04100498-003  
**Report Date:** 04-Nov-04

**Client Project:** 15-03095.15-003  
**Client Sample ID:** HMW-27/041020  
**Collection Date:** 10/20/04 1:45:00 PM  
**Matrix:** GROUNDWATER

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Analyst
m,p-Cresol	NELAP	0.010		ND	mg/L	1	10/27/04 11:50:00 AM	SML
o-Cresol	NELAP	0.010		ND	mg/L	1	10/27/04 11:50:00 AM	SML
Phenol	NELAP	0.005		ND	mg/L	1	10/27/04 11:50:00 AM	SML
Pyrene	NELAP	0.010		ND	mg/L	1	10/27/04 11:50:00 AM	SML
Quinoline		0.005		ND	mg/L	1	10/27/04 11:50:00 AM	SML
Sur: 2,4,6-Tribromophenol		20.3-141		96.0	%REC	1	10/27/04 11:50:00 AM	SML
Sur: 2-Fluorobiphenyl		49.7-127		84.0	%REC	1	10/27/04 11:50:00 AM	SML
Sur: 2-Fluorophenol		21.6-65.9		49.0	%REC	1	10/27/04 11:50:00 AM	SML
Sur: Nitrobenzene-d5		47.4-116		68.0	%REC	1	10/27/04 11:50:00 AM	SML
Sur: p-Terphenyl-d14		29.7-117		78.0	%REC	1	10/27/04 11:50:00 AM	SML
Sur: Phenol-d5		8.57-54.5		33.0	%REC	1	10/27/04 11:50:00 AM	SML
<b><u>SW-846 3510C. 8310. POLYNUCLEAR AROMATIC HYDROCARBONS BY HPLC</u></b>								
Acenaphthene	NELAP	0.00300		ND	mg/L	1	10/22/04	TDN
Acenaphthylene		0.00150		ND	mg/L	1	10/22/04	TDN
Anthracene	NELAP	0.00030		ND	mg/L	1	10/22/04	TDN
Benzo(a)anthracene	NELAP	0.00009		ND	mg/L	1	10/22/04	TDN
Benzo(a)pyrene	NELAP	0.00012		ND	mg/L	1	10/22/04	TDN
Benzo(b)fluoranthene	NELAP	0.00015		ND	mg/L	1	10/22/04	TDN
Benzo(k)fluoranthene	NELAP	0.00015		ND	mg/L	1	10/22/04	TDN
Chrysene	NELAP	0.00045		ND	mg/L	1	10/22/04	TDN
Dibenz(a,h)anthracene	NELAP	0.00018		ND	mg/L	1	10/22/04	TDN
Fluoranthene	NELAP	0.00090		ND	mg/L	1	10/22/04	TDN
Fluorene	NELAP	0.00030		ND	mg/L	1	10/22/04	TDN
Indeno(1,2,3-cd)pyrene	NELAP	0.00030		ND	mg/L	1	10/22/04	TDN
Naphthalene	NELAP	0.00300		ND	mg/L	1	10/22/04	TDN
Phenanthrene	NELAP	0.00060		ND	mg/L	1	10/22/04	TDN
Pyrene	NELAP	0.00030		ND	mg/L	1	10/22/04	TDN
Sur: Terphenyl-d14		62.5-135		100	%REC	1	10/22/04	TDN
<b><u>SW-846 5030. 8260B. VOLATILE ORGANIC COMPOUNDS BY GC/MS</u></b>								
1,1,1-Trichloroethane	NELAP	5.0		ND	µg/L	1	10/21/04 8:24:00 PM	RLH
1,1-Dichloroethane	NELAP	5.0		ND	µg/L	1	10/21/04 8:24:00 PM	RLH
1,2-Dibromoethane	NELAP	5.0		ND	µg/L	1	10/21/04 8:24:00 PM	RLH
1,2-Dichlorobenzene	NELAP	5.0		ND	µg/L	1	10/21/04 8:24:00 PM	RLH
1,2-Dichloroethane	NELAP	5.0		ND	µg/L	1	10/21/04 8:24:00 PM	RLH
1,3-Dichlorobenzene	NELAP	5.0		ND	µg/L	1	10/21/04 8:24:00 PM	RLH
1,4-Dichlorobenzene	NELAP	5.0		ND	µg/L	1	10/21/04 8:24:00 PM	RLH
2-Butanone	NELAP	25.0		ND	µg/L	1	10/21/04 8:24:00 PM	RLH

# TEKLAB, INC.

5445 HORSESHOE LAKE ROAD  
COLLINSVILLE, ILLINOIS 62234

ENVIRONMENTAL TESTING LABORATORY

TEL: 618-344-1004

FAX: 618-344-1005

## Laboratory Results

CLIENT: Clayton Group Services  
WorkOrder: 04100498  
Lab ID: 04100498-003  
Report Date: 04-Nov-04

Client Project: 15-03095.15-003  
Client Sample ID: HMW-27/041020  
Collection Date: 10/20/04 1:45:00 PM  
Matrix: GROUNDWATER

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Analyst
Benzene	NELAP	2.0		ND	µg/L	1	10/21/04 8:24:00 PM	RLH
Carbon disulfide	NELAP	5.0		ND	µg/L	1	10/21/04 8:24:00 PM	RLH
Chlorobenzene	NELAP	5.0		ND	µg/L	1	10/21/04 8:24:00 PM	RLH
Chloroform	NELAP	5.0		ND	µg/L	1	10/21/04 8:24:00 PM	RLH
Ethylbenzene	NELAP	5.0		ND	µg/L	1	10/21/04 8:24:00 PM	RLH
Methyl tert-butyl ether	NELAP	2.0		ND	µg/L	1	10/21/04 8:24:00 PM	RLH
Styrene	NELAP	5.0		ND	µg/L	1	10/21/04 8:24:00 PM	RLH
Tetrachloroethene	NELAP	5.0		ND	µg/L	1	10/21/04 8:24:00 PM	RLH
Toluene	NELAP	5.0		ND	µg/L	1	10/21/04 8:24:00 PM	RLH
Trichloroethene	NELAP	5.0		ND	µg/L	1	10/21/04 8:24:00 PM	RLH
Xylenes, Total	NELAP	5.0		ND	µg/L	1	10/21/04 8:24:00 PM	RLH
Sur: 1,2-Dichloroethane-d4		84.3-135		122	%REC	1	10/21/04 8:24:00 PM	RLH
Sur: 4-Bromofluorobenzene		81.1-113.3		99.4	%REC	1	10/21/04 8:24:00 PM	RLH
Sur: Dibromofluoromethane		88.9-121.2		111	%REC	1	10/21/04 8:24:00 PM	RLH
Sur: Toluene-d8		84.1-114.5		107	%REC	1	10/21/04 8:24:00 PM	RLH
<b><u>SW-846 7470A (TOTAL)</u></b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	10/27/04	JMW
<b><u>SW-846 8015B MODIFIED, 1,4-DIOXANE BY GC/FID</u></b>								
1,4-Dioxane		0.50		ND	mg/L	1	10/25/04 2:43:00 PM	DMH
<b><u>SW-846 9036 (TOTAL)</u></b>								
Sulfate		25		208	mg/L	5	10/25/04 2:24:42 PM	SMR
<b><u>SW-846 9040B</u></b>								
pH	NELAP	1.00		6.76		1	10/21/04 1:43:00 PM	SAK
<b><u>SW-846 9251 (TOTAL)</u></b>								
Chloride		1		20	mg/L	1	10/25/04 2:13:42 PM	SMR

# TEKLAB, INC.

5445 HORSESHOE LAKE ROAD  
COLLINSVILLE, ILLINOIS 62234

ENVIRONMENTAL TESTING LABORATORY

TEL: 618-344-1004  
FAX: 618-344-1005

## Laboratory Results

**CLIENT:** Clayton Group Services  
**WorkOrder:** 04100498  
**Lab ID:** 04100498-004  
**Report Date:** 04-Nov-04

**Client Project:** 15-03095.15-003  
**Client Sample ID:** HMW-28/041020  
**Collection Date:** 10/20/04 4:40:00 PM  
**Matrix:** GROUNDWATER

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Analyst
<b><u>STANDARD METHODS 18TH ED. 2320 B</u></b>								
Alkalinity, Total (as CaCO <sub>3</sub> )	NELAP	0		548	mg/L	1	10/25/04	DLY
<b><u>STANDARD METHODS 18TH ED. 2340 C</u></b>								
Hardness, as ( CaCO <sub>3</sub> )	NELAP	5		630	mg/L	1	10/25/04	JLL
<b><u>STANDARD METHODS 18TH ED. 2540 C (TOTAL)</u></b>								
Total Dissolved Solids	NELAP	20		686	mg/L	1	10/22/04	JRS
<b><u>STANDARD METHODS 18TH ED. 2540 D</u></b>								
Total Suspended Solids	NELAP	6		48	mg/L	1	10/22/04	JRS
<b><u>STANDARD METHODS 18TH ED. 4500-S D (TOTAL)</u></b>								
Sulfide, Total - Colorimetric	NELAP	0.50		< 0.50	mg/L	10	10/25/04 11:50:00 AM	NNH
<b><u>STANDARD METHODS 18TH ED. 5220 D (TOTAL)</u></b>								
Chemical Oxygen Demand	NELAP	20		23	mg/L	1	10/22/04	JLR
<b><u>SW-846 9012A (TOTAL)</u></b>								
Cyanide		0.050		< 0.050	mg/L	1	10/21/04 7:43:52 PM	SMR
<b><u>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</u></b>								
Barium	NELAP	0.0050		0.173	mg/L	1	11/1/04 10:46:53 AM	SAM
Beryllium	NELAP	0.0010		< 0.0010	mg/L	1	11/1/04 10:46:53 AM	SAM
Cadmium	NELAP	0.0020	J	0.0004	mg/L	1	11/1/04 10:46:53 AM	SAM
Chromium	NELAP	0.0100		< 0.0100	mg/L	1	11/1/04 10:46:53 AM	SAM
Cobalt	NELAP	0.0100		0.0193	mg/L	1	11/1/04 10:46:53 AM	SAM
Nickel	NELAP	0.0100		0.0268	mg/L	1	11/1/04 10:46:53 AM	SAM
Silver	NELAP	0.0100		< 0.0100	mg/L	1	11/1/04 10:46:53 AM	SAM
Vanadium	NELAP	0.0100		< 0.0100	mg/L	1	11/1/04 10:46:53 AM	SAM
Zinc	NELAP	0.0100		0.129	mg/L	1	11/1/04 10:46:53 AM	SAM
<b><u>SW-846 3020A, METALS BY GFAA (TOTAL)</u></b>								
Antimony	7041	NELAP	0.0050	< 0.0050	mg/L	1	10/29/04	JMF
Arsenic	7060A	NELAP	0.0030	0.0044	mg/L	1	10/27/04	SRS
Lead	7421	NELAP	0.0020	0.0048	mg/L	1	10/27/04	SRS
Selenium	7740	NELAP	0.0060	< 0.0060	mg/L	1	10/28/04	SRS
<b><u>SW-846 3510C, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS</u></b>								
2,4-Dimethylphenol	NELAP	0.010		ND	mg/L	1	10/27/04 12:28:00 PM	SML
2,4-Dinitrophenol	NELAP	0.020		ND	mg/L	1	10/27/04 12:28:00 PM	SML
4-Nitrophenol	NELAP	0.020		ND	mg/L	1	10/27/04 12:28:00 PM	SML
Bis(2-ethylhexyl)phthalate	NELAP	0.006		ND	mg/L	1	10/27/04 12:28:00 PM	SML
Di-n-butyl phthalate	NELAP	0.010		ND	mg/L	1	10/27/04 12:28:00 PM	SML
Diethyl phthalate	NELAP	0.010		ND	mg/L	1	10/27/04 12:28:00 PM	SML
Dimethyl phthalate		0.010		ND	mg/L	1	10/27/04 12:28:00 PM	SML

# TEKLAB, INC.

5445 HORSESHOE LAKE ROAD  
COLLINSVILLE, ILLINOIS 62234

ENVIRONMENTAL TESTING LABORATORY

TEL: 618-344-1004

FAX: 618-344-1005

## Laboratory Results

**CLIENT:** Clayton Group Services  
**WorkOrder:** 04100498  
**Lab ID:** 04100498-004  
**Report Date:** 04-Nov-04

**Client Project:** 15-03095.15-003  
**Client Sample ID:** HMW-28/041020  
**Collection Date:** 10/20/04 4:40:00 PM  
**Matrix:** GROUNDWATER

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Analyst
m,p-Cresol	NELAP	0.010		ND	mg/L	1	10/27/04 12:28:00 PM	SML
o-Cresol	NELAP	0.010		ND	mg/L	1	10/27/04 12:28:00 PM	SML
Phenol	NELAP	0.005		ND	mg/L	1	10/27/04 12:28:00 PM	SML
Pyrene	NELAP	0.010		ND	mg/L	1	10/27/04 12:28:00 PM	SML
Quinoline		0.005		ND	mg/L	1	10/27/04 12:28:00 PM	SML
Sur: 2,4,6-Tribromophenol		20.3-141		93.0	%REC	1	10/27/04 12:28:00 PM	SML
Sur: 2-Fluorobiphenyl		49.7-127		84.0	%REC	1	10/27/04 12:28:00 PM	SML
Sur: 2-Fluorophenol		21.6-65.9		49.0	%REC	1	10/27/04 12:28:00 PM	SML
Sur: Nitrobenzene-d5		47.4-116		68.0	%REC	1	10/27/04 12:28:00 PM	SML
Sur: p-Terphenyl-d14		29.7-117		74.0	%REC	1	10/27/04 12:28:00 PM	SML
Sur: Phenol-d5		8.57-54.5		33.0	%REC	1	10/27/04 12:28:00 PM	SML
<b><u>SW-846 3510C, 8310, POLYNUCLEAR AROMATIC HYDROCARBONS BY HPLC</u></b>								
Acenaphthene	NELAP	0.00300		ND	mg/L	1	10/22/04	TDN
Acenaphthylene		0.00150		ND	mg/L	1	10/22/04	TDN
Anthracene	NELAP	0.00030		ND	mg/L	1	10/22/04	TDN
Benzo(a)anthracene	NELAP	0.00009		ND	mg/L	1	10/22/04	TDN
Benzo(a)pyrene	NELAP	0.00012		ND	mg/L	1	10/22/04	TDN
Benzo(b)fluoranthene	NELAP	0.00015		ND	mg/L	1	10/22/04	TDN
Benzo(k)fluoranthene	NELAP	0.00015		ND	mg/L	1	10/22/04	TDN
Chrysene	NELAP	0.00045		ND	mg/L	1	10/22/04	TDN
Dibenzo(a,h)anthracene	NELAP	0.00018		ND	mg/L	1	10/22/04	TDN
Fluoranthene	NELAP	0.00090		ND	mg/L	1	10/22/04	TDN
Fluorene	NELAP	0.00030		ND	mg/L	1	10/22/04	TDN
Indeno(1,2,3-cd)pyrene	NELAP	0.00030		ND	mg/L	1	10/22/04	TDN
Naphthalene	NELAP	0.00300		ND	mg/L	1	10/22/04	TDN
Phenanthrene	NELAP	0.00060		ND	mg/L	1	10/22/04	TDN
Pyrene	NELAP	0.00030		ND	mg/L	1	10/22/04	TDN
Sur: Terphenyl-d14		62.5-135		97.3	%REC	1	10/22/04	TDN
<b><u>SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS</u></b>								
1,1,1-Trichloroethane	NELAP	5.0		ND	µg/L	1	10/25/04 1:12:00 PM	RLH
1,1-Dichloroethane	NELAP	5.0		ND	µg/L	1	10/25/04 1:12:00 PM	RLH
1,2-Dibromoethane	NELAP	5.0		ND	µg/L	1	10/25/04 1:12:00 PM	RLH
1,2-Dichlorobenzene	NELAP	5.0		ND	µg/L	1	10/25/04 1:12:00 PM	RLH
1,2-Dichloroethane	NELAP	5.0		ND	µg/L	1	10/25/04 1:12:00 PM	RLH
1,3-Dichlorobenzene	NELAP	5.0		ND	µg/L	1	10/25/04 1:12:00 PM	RLH
1,4-Dichlorobenzene	NELAP	5.0		ND	µg/L	1	10/25/04 1:12:00 PM	RLH
2-Butanone	NELAP	25.0		ND	µg/L	1	10/25/04 1:12:00 PM	RLH

# TEKLAB, INC.

5445 HORSESHOE LAKE ROAD  
COLLINSVILLE, ILLINOIS 62234

ENVIRONMENTAL TESTING LABORATORY

TEL: 618-344-1004  
FAX: 618-344-1005

## Laboratory Results

**CLIENT:** Clayton Group Services  
**WorkOrder:** 04100498  
**Lab ID:** 04100498-004  
**Report Date:** 04-Nov-04

**Client Project:** 15-03095.15-003  
**Client Sample ID:** HMW-28/041020  
**Collection Date:** 10/20/04 4:40:00 PM  
**Matrix:** GROUNDWATER

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Analyst
Benzene	NELAP	2.0		ND	µg/L	1	10/25/04 1:12:00 PM	RLH
Carbon disulfide	NELAP	5.0		ND	µg/L	1	10/25/04 1:12:00 PM	RLH
Chlorobenzene	NELAP	5.0		ND	µg/L	1	10/25/04 1:12:00 PM	RLH
Chloroform	NELAP	5.0		ND	µg/L	1	10/25/04 1:12:00 PM	RLH
Ethylbenzene	NELAP	5.0		ND	µg/L	1	10/25/04 1:12:00 PM	RLH
Methyl tert-butyl ether	NELAP	2.0		ND	µg/L	1	10/25/04 1:12:00 PM	RLH
Styrene	NELAP	5.0		ND	µg/L	1	10/25/04 1:12:00 PM	RLH
Tetrachloroethene	NELAP	5.0		ND	µg/L	1	10/25/04 1:12:00 PM	RLH
Toluene	NELAP	5.0		ND	µg/L	1	10/25/04 1:12:00 PM	RLH
Trichloroethene	NELAP	5.0		ND	µg/L	1	10/25/04 1:12:00 PM	RLH
Xylenes, Total	NELAP	5.0		ND	µg/L	1	10/25/04 1:12:00 PM	RLH
Surr: 1,2-Dichloroethane-d4		84.3-135		95.4	%REC	1	10/25/04 1:12:00 PM	RLH
Surr: 4-Bromofluorobenzene		81.1-113.3		99.4	%REC	1	10/25/04 1:12:00 PM	RLH
Surr: Dibromofluoromethane		88.9-121.2		98.8	%REC	1	10/25/04 1:12:00 PM	RLH
Surr: Toluene-d8		84.1-114.5		100	%REC	1	10/25/04 1:12:00 PM	RLH
<b><u>SW-846 7470A (TOTAL)</u></b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	10/27/04	JMW
<b><u>SW-846 8015B MODIFIED, 1,4-DIOXANE BY GC/FID</u></b>								
1,4-Dioxane		0.50		ND	mg/L	1	10/25/04 3:00:00 PM	DMH
<b><u>SW-846 9036 (TOTAL)</u></b>								
Sulfate		10		82	mg/L	2	10/25/04 4:06:28 PM	SMR
<b><u>SW-846 9040B</u></b>								
pH	NELAP	1.00		6.80		1	10/21/04 2:20:00 PM	SAK
<b><u>SW-846 9251 (TOTAL)</u></b>								
Chloride		2		36	mg/L	2	10/25/04 4:14:22 PM	SMR

ENVIRONMENTAL TESTING LABORATORY

TEL: 618-344-1004

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## Laboratory Results

**CLIENT:** Clayton Group Services  
**WorkOrder:** 04100498  
**Lab ID:** 04100498-005  
**Report Date:** 04-Nov-04

**Client Project:** 15-03095.15-003  
**Client Sample ID:** HMW-29/041020  
**Collection Date:** 10/20/04 6:30:00 PM  
**Matrix:** GROUNDWATER

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Analyst
<b><u>STANDARD METHODS 18TH ED. 2320 B</u></b>								
Alkalinity, Total (as CaCO <sub>3</sub> )	NELAP	0		654	mg/L	1	10/25/04	DLY
<b><u>STANDARD METHODS 18TH ED. 2340 C</u></b>								
Hardness, as ( CaCO <sub>3</sub> )	NELAP	5		540	mg/L	1	10/25/04	JLL
<b><u>STANDARD METHODS 18TH ED. 2540 C (TOTAL)</u></b>								
Total Dissolved Solids	NELAP	20		622	mg/L	1	10/22/04	JRS
<b><u>STANDARD METHODS 18TH ED. 2540 D</u></b>								
Total Suspended Solids	NELAP	6		550	mg/L	1	10/22/04	JRS
<b><u>STANDARD METHODS 18TH ED. 4500-S D (TOTAL)</u></b>								
Sulfide, Total - Colorimetric	NELAP	1.2		< 1.2	mg/L	25	10/25/04 11:50:00 AM	NNH
<b><u>STANDARD METHODS 18TH ED. 5220 D (TOTAL)</u></b>								
Chemical Oxygen Demand	NELAP	20		46	mg/L	1	10/22/04	JLR
<b><u>SW-846 9012A (TOTAL)</u></b>								
Cyanide		0.050		< 0.050	mg/L	1	10/21/04 7:47:26 PM	SMR
<b><u>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</u></b>								
Barium	NELAP	0.0050		0.221	mg/L	1	11/1/04 10:52:14 AM	SAM
Beryllium	NELAP	0.0010		< 0.0010	mg/L	1	11/1/04 10:52:14 AM	SAM
Cadmium	NELAP	0.0020	J	0.0007	mg/L	1	11/1/04 10:52:14 AM	SAM
Chromium	NELAP	0.0100		< 0.0100	mg/L	1	11/1/04 10:52:14 AM	SAM
Cobalt	NELAP	0.0100	J	0.0052	mg/L	1	11/1/04 10:52:14 AM	SAM
Nickel	NELAP	0.0100		0.0152	mg/L	1	11/1/04 10:52:14 AM	SAM
Silver	NELAP	0.0100		< 0.0100	mg/L	1	11/1/04 10:52:14 AM	SAM
Vanadium	NELAP	0.0100		< 0.0100	mg/L	1	11/1/04 10:52:14 AM	SAM
Zinc	NELAP	0.0100		0.0345	mg/L	1	11/1/04 10:52:14 AM	SAM
<b><u>SW-846 3020A, METALS BY GFAA (TOTAL)</u></b>								
Antimony	7041	NELAP	0.0050	< 0.0050	mg/L	1	10/29/04	JMF
Arsenic	7060A	NELAP	0.0030	0.0035	mg/L	1	10/27/04	SRS
Lead	7421	NELAP	0.0020	0.0134	mg/L	1	10/27/04	SRS
Selenium	7740	NELAP	0.0060	< 0.0060	mg/L	1	10/28/04	SRS
<b><u>SW-846 3510C, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS</u></b>								
2,4-Dimethylphenol	NELAP	0.010		ND	mg/L	1	10/27/04 1:05:00 PM	SML
2,4-Dinitrophenol	NELAP	0.020		ND	mg/L	1	10/27/04 1:05:00 PM	SML
4-Nitrophenol	NELAP	0.020		ND	mg/L	1	10/27/04 1:05:00 PM	SML
Bis(2-ethylhexyl)phthalate	NELAP	0.006		ND	mg/L	1	10/27/04 1:05:00 PM	SML
Di-n-butyl phthalate	NELAP	0.010		ND	mg/L	1	10/27/04 1:05:00 PM	SML
Diethyl phthalate	NELAP	0.010		ND	mg/L	1	10/27/04 1:05:00 PM	SML
Dimethyl phthalate		0.010		ND	mg/L	1	10/27/04 1:05:00 PM	SML

# TEKLAB, INC.

5445 HORSESHOE LAKE ROAD  
COLLINSVILLE, ILLINOIS 62234

ENVIRONMENTAL TESTING LABORATORY

TEL: 618-344-1004  
FAX: 618-344-1005

## Laboratory Results

**CLIENT:** Clayton Group Services  
**WorkOrder:** 04100498  
**Lab ID:** 04100498-005  
**Report Date:** 04-Nov-04

**Client Project:** 15-03095.15-003  
**Client Sample ID:** HMW-29/041020  
**Collection Date:** 10/20/04 6:30:00 PM  
**Matrix:** GROUNDWATER

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Analyst
m,p-Cresol	NELAP	0.010		ND	mg/L	1	10/27/04 1:05:00 PM	SML
o-Cresol	NELAP	0.010		ND	mg/L	1	10/27/04 1:05:00 PM	SML
Phenol	NELAP	0.005		ND	mg/L	1	10/27/04 1:05:00 PM	SML
Pyrene	NELAP	0.010		ND	mg/L	1	10/27/04 1:05:00 PM	SML
Quinoline		0.005		ND	mg/L	1	10/27/04 1:05:00 PM	SML
Sur: 2,4,6-Tribromophenol		20.3-141		99.0	%REC	1	10/27/04 1:05:00 PM	SML
Sur: 2-Fluorobiphenyl		49.7-127		90.0	%REC	1	10/27/04 1:05:00 PM	SML
Sur: 2-Fluorophenol		21.6-65.9		49.0	%REC	1	10/27/04 1:05:00 PM	SML
Sur: Nitrobenzene-d5		47.4-116		70.0	%REC	1	10/27/04 1:05:00 PM	SML
Sur: p-Terphenyl-d14		29.7-117		86.0	%REC	1	10/27/04 1:05:00 PM	SML
Sur: Phenol-d5		8.57-54.5		33.0	%REC	1	10/27/04 1:05:00 PM	SML
<b><u>SW-846 3510C, 8310, POLYNUCLEAR AROMATIC HYDROCARBONS BY HPLC</u></b>								
Acenaphthene	NELAP	0.00300		ND	mg/L	1	10/22/04	TDN
Acenaphthylene		0.00150		ND	mg/L	1	10/22/04	TDN
Anthracene	NELAP	0.00030		ND	mg/L	1	10/22/04	TDN
Benzo(a)anthracene	NELAP	0.00009		ND	mg/L	1	10/22/04	TDN
Benzo(a)pyrene	NELAP	0.00012		ND	mg/L	1	10/22/04	TDN
Benzo(b)fluoranthene	NELAP	0.00015		ND	mg/L	1	10/22/04	TDN
Benzo(k)fluoranthene	NELAP	0.00015		ND	mg/L	1	10/22/04	TDN
Chrysene	NELAP	0.00045		ND	mg/L	1	10/22/04	TDN
Dibenzo(a,h)anthracene	NELAP	0.00018		ND	mg/L	1	10/22/04	TDN
Fluoranthene	NELAP	0.00090		ND	mg/L	1	10/22/04	TDN
Fluorene	NELAP	0.00030		ND	mg/L	1	10/22/04	TDN
Indeno(1,2,3-cd)pyrene	NELAP	0.00030		ND	mg/L	1	10/22/04	TDN
Naphthalene	NELAP	0.00300		ND	mg/L	1	10/22/04	TDN
Phenanthrene	NELAP	0.00060		ND	mg/L	1	10/22/04	TDN
Pyrene	NELAP	0.00030		ND	mg/L	1	10/22/04	TDN
Sur: Terphenyl-d14		62.5-135		96.0	%REC	1	10/22/04	TDN
<b><u>SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS</u></b>								
1,1,1-Trichloroethane	NELAP	5.0		ND	µg/L	1	10/25/04 1:43:00 PM	RLH
1,1-Dichloroethane	NELAP	5.0		ND	µg/L	1	10/25/04 1:43:00 PM	RLH
1,2-Dibromoethane	NELAP	5.0		ND	µg/L	1	10/25/04 1:43:00 PM	RLH
1,2-Dichlorobenzene	NELAP	5.0		ND	µg/L	1	10/25/04 1:43:00 PM	RLH
1,2-Dichloroethane	NELAP	5.0		ND	µg/L	1	10/25/04 1:43:00 PM	RLH
1,3-Dichlorobenzene	NELAP	5.0		ND	µg/L	1	10/25/04 1:43:00 PM	RLH
1,4-Dichlorobenzene	NELAP	5.0		ND	µg/L	1	10/25/04 1:43:00 PM	RLH
2-Butanone	NELAP	25.0		ND	µg/L	1	10/25/04 1:43:00 PM	RLH

# TEKLAB, INC.

5445 HORSESHOE LAKE ROAD  
COLLINSVILLE, ILLINOIS 62234

ENVIRONMENTAL TESTING LABORATORY

TEL: 618-344-1004  
FAX: 618-344-1005

## Laboratory Results

**CLIENT:** Clayton Group Services  
**WorkOrder:** 04100498  
**Lab ID:** 04100498-005  
**Report Date:** 04-Nov-04

**Client Project:** 15-03095.15-003  
**Client Sample ID:** HMW-29/041020  
**Collection Date:** 10/20/04 6:30:00 PM  
**Matrix:** GROUNDWATER

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Analyst
Benzene	NELAP	2.0		ND	µg/L	1	10/25/04 1:43:00 PM	RLH
Carbon disulfide	NELAP	5.0		ND	µg/L	1	10/25/04 1:43:00 PM	RLH
Chlorobenzene	NELAP	5.0		ND	µg/L	1	10/25/04 1:43:00 PM	RLH
Chloroform	NELAP	5.0		ND	µg/L	1	10/25/04 1:43:00 PM	RLH
Ethylbenzene	NELAP	5.0		ND	µg/L	1	10/25/04 1:43:00 PM	RLH
Methyl tert-butyl ether	NELAP	2.0		ND	µg/L	1	10/25/04 1:43:00 PM	RLH
Styrene	NELAP	5.0		ND	µg/L	1	10/25/04 1:43:00 PM	RLH
Tetrachloroethene	NELAP	5.0		ND	µg/L	1	10/25/04 1:43:00 PM	RLH
Toluene	NELAP	5.0		ND	µg/L	1	10/25/04 1:43:00 PM	RLH
Trichloroethene	NELAP	5.0		ND	µg/L	1	10/25/04 1:43:00 PM	RLH
Xylenes, Total	NELAP	5.0		ND	µg/L	1	10/25/04 1:43:00 PM	RLH
Surf: 1,2-Dichloroethane-d4		84.3-135		94.6	%REC	1	10/25/04 1:43:00 PM	RLH
Surf: 4-Bromofluorobenzene		81.1-113.3		100	%REC	1	10/25/04 1:43:00 PM	RLH
Surf: Dibromofluoromethane		88.9-121.2		96.4	%REC	1	10/25/04 1:43:00 PM	RLH
Surf: Toluene-d8		84.1-114.5		101	%REC	1	10/25/04 1:43:00 PM	RLH
<b><u>SW-846 7470A (TOTAL)</u></b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	10/27/04	JMW
<b><u>SW-846 8015B MODIFIED, 1,4-DIOXANE BY GC/FID</u></b>								
1,4-Dioxane		0.50		ND	mg/L	1	10/26/04 9:31:00 AM	DMH
<b><u>SW-846 9036 (TOTAL)</u></b>								
Sulfate		10		84	mg/L	2	10/25/04 4:08:51 PM	SMR
<b><u>SW-846 9040B</u></b>								
pH	NELAP	1.00		6.88		1	10/21/04 2:21:00 PM	SAK
<b><u>SW-846 9251 (TOTAL)</u></b>								
Chloride		1		15	mg/L	1	10/25/04 2:18:26 PM	SMR

ENVIRONMENTAL TESTING LABORATORY

TEL: 618-344-1004  
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## Laboratory Results

**CLIENT:** Clayton Group Services  
**WorkOrder:** 04100498  
**Lab ID:** 04100498-006  
**Report Date:** 04-Nov-04

**Client Project:** 15-03095.15-003  
**Client Sample ID:** Dup-001/041020  
**Collection Date:** 10/20/04  
**Matrix:** GROUNDWATER

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Analyst
<b><u>STANDARD METHODS 18TH ED. 2320 B</u></b>								
Alkalinity, Total (as CaCO <sub>3</sub> )	NELAP	0		604	mg/L	1	10/25/04	DLY
<b><u>STANDARD METHODS 18TH ED. 2340 C</u></b>								
Hardness, as ( CaCO <sub>3</sub> )	NELAP	5		920	mg/L	1	10/25/04	JLL
<b><u>STANDARD METHODS 18TH ED. 2540 C (TOTAL)</u></b>								
Total Dissolved Solids	NELAP	20		1230	mg/L	1	10/22/04	JRS
<b><u>STANDARD METHODS 18TH ED. 2540 D</u></b>								
Total Suspended Solids	NELAP	6		67	mg/L	1	10/22/04	JRS
<b><u>STANDARD METHODS 18TH ED. 4500-S D (TOTAL)</u></b>								
Sulfide, Total - Colorimetric	NELAP	0.05	J	0.03	mg/L	1	10/25/04 11:50:00 AM	NNH
<b><u>STANDARD METHODS 18TH ED. 5220 D (TOTAL)</u></b>								
Chemical Oxygen Demand	NELAP	20		23	mg/L	1	10/22/04	JLR
<b><u>SW-846 9012A (TOTAL)</u></b>								
Cyanide		0.050		< 0.050	mg/L	1	10/21/04 7:50:24 PM	SMR
<b><u>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</u></b>								
Barium	NELAP	0.0050		0.202	mg/L	1	11/1/04 10:57:35 AM	SAM
Beryllium	NELAP	0.0010		< 0.0010	mg/L	1	11/1/04 10:57:35 AM	SAM
Cadmium	NELAP	0.0020	J	0.0003	mg/L	1	11/1/04 10:57:35 AM	SAM
Chromium	NELAP	0.0100		< 0.0100	mg/L	1	11/1/04 10:57:35 AM	SAM
Cobalt	NELAP	0.0100		< 0.0100	mg/L	1	11/1/04 10:57:35 AM	SAM
Nickel	NELAP	0.0100		< 0.0100	mg/L	1	11/1/04 10:57:35 AM	SAM
Silver	NELAP	0.0100		< 0.0100	mg/L	1	11/1/04 10:57:35 AM	SAM
Vanadium	NELAP	0.0100		< 0.0100	mg/L	1	11/1/04 10:57:35 AM	SAM
Zinc	NELAP	0.0100		0.129	mg/L	1	11/1/04 10:57:35 AM	SAM
<b><u>SW-846 3020A, METALS BY GFAA (TOTAL)</u></b>								
Antimony	7041	NELAP	0.0050	< 0.0050	mg/L	1	10/29/04	JMF
Arsenic	7060A	NELAP	0.0030	J 0.0017	mg/L	1	10/27/04	SRS
Lead	7421	NELAP	0.0020	J 0.0006	mg/L	1	10/27/04	SRS
Selenium	7740	NELAP	0.0060	< 0.0060	mg/L	1	10/28/04	SRS
<b><u>SW-846 3510C, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS</u></b>								
2,4-Dimethylphenol	NELAP	0.010		ND	mg/L	1	10/27/04 1:43:00 PM	SML
2,4-Dinitrophenol	NELAP	0.020		ND	mg/L	1	10/27/04 1:43:00 PM	SML
4-Nitrophenol	NELAP	0.020		ND	mg/L	1	10/27/04 1:43:00 PM	SML
Bis(2-ethylhexyl)phthalate	NELAP	0.006		ND	mg/L	1	10/27/04 1:43:00 PM	SML
Di-n-butyl phthalate	NELAP	0.010		ND	mg/L	1	10/27/04 1:43:00 PM	SML
Diethyl phthalate	NELAP	0.010		ND	mg/L	1	10/27/04 1:43:00 PM	SML
Dimethyl phthalate	NELAP	0.010		ND	mg/L	1	10/27/04 1:43:00 PM	SML

# TEKLAB, INC.

5445 HORSESHOE LAKE ROAD  
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ENVIRONMENTAL TESTING LABORATORY

TEL: 618-344-1004  
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## Laboratory Results

**CLIENT:** Clayton Group Services  
**WorkOrder:** 04100498  
**Lab ID:** 04100498-006  
**Report Date:** 04-Nov-04

**Client Project:** 15-03095.15-003  
**Client Sample ID:** Dup-001/041020  
**Collection Date:** 10/20/04  
**Matrix:** GROUNDWATER

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Analyst
m,p-Cresol	NELAP	0.010		ND	mg/L	1	10/27/04 1:43:00 PM	SML
o-Cresol	NELAP	0.010		ND	mg/L	1	10/27/04 1:43:00 PM	SML
Phenol	NELAP	0.005		ND	mg/L	1	10/27/04 1:43:00 PM	SML
Pyrene	NELAP	0.010		ND	mg/L	1	10/27/04 1:43:00 PM	SML
Quinoline		0.005		ND	mg/L	1	10/27/04 1:43:00 PM	SML
Surr: 2,4,6-Tribromophenol		20.3-141		93.0	%REC	1	10/27/04 1:43:00 PM	SML
Surr: 2-Fluorobiphenyl		49.7-127		84.0	%REC	1	10/27/04 1:43:00 PM	SML
Surr: 2-Fluorophenol		21.6-65.9		49.0	%REC	1	10/27/04 1:43:00 PM	SML
Surr: Nitrobenzene-d5		47.4-116		68.0	%REC	1	10/27/04 1:43:00 PM	SML
Surr: p-Terphenyl-d14		29.7-117		76.0	%REC	1	10/27/04 1:43:00 PM	SML
Surr: Phenol-d5		8.57-54.5		33.0	%REC	1	10/27/04 1:43:00 PM	SML
<b><u>SW-846 3510C, 8310. POLYNUCLEAR AROMATIC HYDROCARBONS BY HPLC</u></b>								
Acenaphthene	NELAP	0.00300		ND	mg/L	1	10/22/04	TDN
Acenaphthylene		0.00150		ND	mg/L	1	10/22/04	TDN
Anthracene	NELAP	0.00030		ND	mg/L	1	10/22/04	TDN
Benzo(a)anthracene	NELAP	0.00009		ND	mg/L	1	10/22/04	TDN
Benzo(a)pyrene	NELAP	0.00012		ND	mg/L	1	10/22/04	TDN
Benzo(b)fluoranthene	NELAP	0.00015		ND	mg/L	1	10/22/04	TDN
Benzo(k)fluoranthene	NELAP	0.00015		ND	mg/L	1	10/22/04	TDN
Chrysene	NELAP	0.00045		ND	mg/L	1	10/22/04	TDN
Dibenzo(a,h)anthracene	NELAP	0.00018		ND	mg/L	1	10/22/04	TDN
Fluoranthene	NELAP	0.00090		ND	mg/L	1	10/22/04	TDN
Fluorene	NELAP	0.00030		ND	mg/L	1	10/22/04	TDN
Indeno(1,2,3-cd)pyrene	NELAP	0.00030		ND	mg/L	1	10/22/04	TDN
Naphthalene	NELAP	0.00300		ND	mg/L	1	10/22/04	TDN
Phenanthrene	NELAP	0.00060		ND	mg/L	1	10/22/04	TDN
Pyrene	NELAP	0.00030		ND	mg/L	1	10/22/04	TDN
Surr: Terphenyl-d14		62.5-135		95.7	%REC	1	10/22/04	TDN
<b><u>SW-846 5030, 8260B. VOLATILE ORGANIC COMPOUNDS BY GC/MS</u></b>								
1,1,1-Trichloroethane	NELAP	5.0		ND	µg/L	1	10/25/04 2:14:00 PM	RLH
1,1-Dichloroethane	NELAP	5.0		ND	µg/L	1	10/25/04 2:14:00 PM	RLH
1,2-Dibromoethane	NELAP	5.0		ND	µg/L	1	10/25/04 2:14:00 PM	RLH
1,2-Dichlorobenzene	NELAP	5.0		ND	µg/L	1	10/25/04 2:14:00 PM	RLH
1,2-Dichloroethane	NELAP	5.0		ND	µg/L	1	10/25/04 2:14:00 PM	RLH
1,3-Dichlorobenzene	NELAP	5.0		ND	µg/L	1	10/25/04 2:14:00 PM	RLH
1,4-Dichlorobenzene	NELAP	5.0		ND	µg/L	1	10/25/04 2:14:00 PM	RLH
2-Butanone	NELAP	25.0		ND	µg/L	1	10/25/04 2:14:00 PM	RLH

# TEKLAB, INC.

5445 HORSESHOE LAKE ROAD  
COLLINSVILLE, ILLINOIS 62234

ENVIRONMENTAL TESTING LABORATORY

TEL: 618-344-1004  
FAX: 618-344-1005

## Laboratory Results

**CLIENT:** Clayton Group Services  
**WorkOrder:** 04100498  
**Lab ID:** 04100498-006  
**Report Date:** 04-Nov-04

**Client Project:** 15-03095.15-003  
**Client Sample ID:** Dup-001/041020  
**Collection Date:** 10/20/04  
**Matrix:** GROUNDWATER

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Analyst
Benzene	NELAP	2.0		ND	µg/L	1	10/25/04 2:14:00 PM	RLH
Carbon disulfide	NELAP	5.0		ND	µg/L	1	10/25/04 2:14:00 PM	RLH
Chlorobenzene	NELAP	5.0		ND	µg/L	1	10/25/04 2:14:00 PM	RLH
Chloroform	NELAP	5.0		ND	µg/L	1	10/25/04 2:14:00 PM	RLH
Ethylbenzene	NELAP	5.0		ND	µg/L	1	10/25/04 2:14:00 PM	RLH
Methyl tert-butyl ether	NELAP	2.0		ND	µg/L	1	10/25/04 2:14:00 PM	RLH
Styrene	NELAP	5.0		ND	µg/L	1	10/25/04 2:14:00 PM	RLH
Tetrachloroethene	NELAP	5.0		ND	µg/L	1	10/25/04 2:14:00 PM	RLH
Toluene	NELAP	5.0		ND	µg/L	1	10/25/04 2:14:00 PM	RLH
Trichloroethene	NELAP	5.0		ND	µg/L	1	10/25/04 2:14:00 PM	RLH
Xylenes, Total	NELAP	5.0		ND	µg/L	1	10/25/04 2:14:00 PM	RLH
Surr: 1,2-Dichloroethane-d4		84.3-135		99.6	%REC	1	10/25/04 2:14:00 PM	RLH
Surr: 4-Bromofluorobenzene		81.1-113.3		99.4	%REC	1	10/25/04 2:14:00 PM	RLH
Surr: Dibromofluoromethane		88.9-121.2		99.4	%REC	1	10/25/04 2:14:00 PM	RLH
Surr: Toluene-d8		84.1-114.5		103	%REC	1	10/25/04 2:14:00 PM	RLH
<b><u>SW-846 7470A (TOTAL)</u></b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	10/28/04	JMW
<b><u>SW-846 8015B MODIFIED, 1,4-DIOXANE BY GC/FID</u></b>								
1,4-Dioxane		0.50		ND	mg/L	1	10/26/04 10:10:00 AM	DMH
<b><u>SW-846 9036 (TOTAL)</u></b>								
Sulfate		50		341	mg/L	10	10/25/04 4:11:13 PM	SMR
<b><u>SW-846 9040B</u></b>								
pH	NELAP	1.00	H	6.71		1	10/21/04 2:22:00 PM	SAK
<b><u>SW-846 9251 (TOTAL)</u></b>								
Chloride		5		100	mg/L	5	10/29/04 12:55:17 PM	SMR

ENVIRONMENTAL TESTING LABORATORY

TEL: 618-344-1004

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## Laboratory Results

**CLIENT:** Clayton Group Services  
**WorkOrder:** 04100498  
**Lab ID:** 04100498-007  
**Report Date:** 04-Nov-04

**Client Project:** 15-03095.15-003  
**Client Sample ID:** EQB-001/041020  
**Collection Date:** 10/20/04 3:45:00 PM  
**Matrix:** GROUNDWATER

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Analyst
<b><u>STANDARD METHODS 18TH ED. 2320 B</u></b>								
Alkalinity, Total (as CaCO <sub>3</sub> )	NELAP	0		12	mg/L	1	10/25/04	DLY
<b><u>STANDARD METHODS 18TH ED. 2340 C</u></b>								
Hardness, as ( CaCO <sub>3</sub> )	NELAP	5		< 5	mg/L	1	10/25/04	JLL
<b><u>STANDARD METHODS 18TH ED. 2540 C (TOTAL)</u></b>								
Total Dissolved Solids	NELAP	20		< 20	mg/L	1	10/22/04	JRS
<b><u>STANDARD METHODS 18TH ED. 2540 D</u></b>								
Total Suspended Solids	NELAP	6		< 6	mg/L	1	10/22/04	JRS
<b><u>STANDARD METHODS 18TH ED. 4500-S D (TOTAL)</u></b>								
Sulfide, Total - Colorimetric	NELAP	0.05	J	0.02	mg/L	1	10/25/04 11:50:00 AM	NNH
<b><u>STANDARD METHODS 18TH ED. 5220 D (TOTAL)</u></b>								
Chemical Oxygen Demand	NELAP	20	J	7	mg/L	1	10/22/04	JLR
<b><u>SW-846 9012A (TOTAL)</u></b>								
Cyanide		0.050		< 0.050	mg/L	1	10/21/04 7:54:14 PM	SMR
<b><u>SW-846 3005A, 6010B, METALS BY ICP (TOTAL)</u></b>								
Barium	NELAP	0.0050		< 0.0050	mg/L	1	11/1/04 11:02:55 AM	SAM
Beryllium	NELAP	0.0010		< 0.0010	mg/L	1	11/1/04 11:02:55 AM	SAM
Cadmium	NELAP	0.0020		< 0.0020	mg/L	1	11/1/04 11:02:55 AM	SAM
Chromium	NELAP	0.0100		< 0.0100	mg/L	1	11/1/04 11:02:55 AM	SAM
Cobalt	NELAP	0.0100		< 0.0100	mg/L	1	11/1/04 11:02:55 AM	SAM
Nickel	NELAP	0.0100		< 0.0100	mg/L	1	11/1/04 11:02:55 AM	SAM
Silver	NELAP	0.0100		< 0.0100	mg/L	1	11/1/04 11:02:55 AM	SAM
Vanadium	NELAP	0.0100		< 0.0100	mg/L	1	11/1/04 11:02:55 AM	SAM
Zinc	NELAP	0.0100		< 0.0100	mg/L	1	11/1/04 11:02:55 AM	SAM
<b><u>SW-846 3020A, METALS BY GFAA (TOTAL)</u></b>								
Antimony	7041	NELAP	0.0050	< 0.0050	mg/L	1	10/29/04	JMF
Arsenic	7060A	NELAP	0.0030	< 0.0030	mg/L	1	10/27/04	SRS
Lead	7421	NELAP	0.0020	J 0.0006	mg/L	1	10/27/04	SRS
Selenium	7740	NELAP	0.0060	< 0.0060	mg/L	1	10/28/04	SRS
<b><u>SW-846 3510C, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS</u></b>								
2,4-Dimethylphenol	NELAP	0.010		ND	mg/L	1	10/27/04 2:22:00 PM	SML
2,4-Dinitrophenol	NELAP	0.020		ND	mg/L	1	10/27/04 2:22:00 PM	SML
4-Nitrophenol	NELAP	0.020		ND	mg/L	1	10/27/04 2:22:00 PM	SML
Bis(2-ethylhexyl)phthalate	NELAP	0.006		ND	mg/L	1	10/27/04 2:22:00 PM	SML
Di-n-butyl phthalate	NELAP	0.010		ND	mg/L	1	10/27/04 2:22:00 PM	SML
Diethyl phthalate	NELAP	0.010		ND	mg/L	1	10/27/04 2:22:00 PM	SML
Dimethyl phthalate		0.010		ND	mg/L	1	10/27/04 2:22:00 PM	SML

# TEKLAB, INC.

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ENVIRONMENTAL TESTING LABORATORY

TEL: 618-344-1004  
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## Laboratory Results

**CLIENT:** Clayton Group Services  
**WorkOrder:** 04100498  
**Lab ID:** 04100498-007  
**Report Date:** 04-Nov-04

**Client Project:** 15-03095.15-003  
**Client Sample ID:** EQB-001/041020  
**Collection Date:** 10/20/04 3:45:00 PM  
**Matrix:** GROUNDWATER

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Analyst
m,p-Cresol	NELAP	0.010		ND	mg/L	1	10/27/04 2:22:00 PM	SML
o-Cresol	NELAP	0.010		ND	mg/L	1	10/27/04 2:22:00 PM	SML
Phenol	NELAP	0.005		ND	mg/L	1	10/27/04 2:22:00 PM	SML
Pyrene	NELAP	0.010		ND	mg/L	1	10/27/04 2:22:00 PM	SML
Quinoline		0.005		ND	mg/L	1	10/27/04 2:22:00 PM	SML
Surr: 2,4,6-Tribromophenol		20.3-141		97.0	%REC	1	10/27/04 2:22:00 PM	SML
Surr: 2-Fluorobiphenyl		49.7-127		90.0	%REC	1	10/27/04 2:22:00 PM	SML
Surr: 2-Fluorophenol		21.6-65.9		51.0	%REC	1	10/27/04 2:22:00 PM	SML
Surr: Nitrobenzene-d5		47.4-116		72.0	%REC	1	10/27/04 2:22:00 PM	SML
Surr: p-Terphenyl-d14		29.7-117		98.0	%REC	1	10/27/04 2:22:00 PM	SML
Surr: Phenol-d5		8.57-54.5		34.0	%REC	1	10/27/04 2:22:00 PM	SML
<b><u>SW-846 3510C. 8310. POLYNUCLEAR AROMATIC HYDROCARBONS BY HPLC</u></b>								
Acenaphthene	NELAP	0.00300		ND	mg/L	1	10/22/04	TDN
Acenaphthylene		0.00150		ND	mg/L	1	10/22/04	TDN
Anthracene	NELAP	0.00030		ND	mg/L	1	10/22/04	TDN
Benzo(a)anthracene	NELAP	0.00009		ND	mg/L	1	10/22/04	TDN
Benzo(a)pyrene	NELAP	0.00012		ND	mg/L	1	10/22/04	TDN
Benzo(b)fluoranthene	NELAP	0.00015		ND	mg/L	1	10/22/04	TDN
Benzo(k)fluoranthene	NELAP	0.00015		ND	mg/L	1	10/22/04	TDN
Chrysene	NELAP	0.00045		ND	mg/L	1	10/22/04	TDN
Dibenz(a,h)anthracene	NELAP	0.00018		ND	mg/L	1	10/22/04	TDN
Fluoranthene	NELAP	0.00090		ND	mg/L	1	10/22/04	TDN
Fluorene	NELAP	0.00030		ND	mg/L	1	10/22/04	TDN
Indeno(1,2,3-cd)pyrene	NELAP	0.00030		ND	mg/L	1	10/22/04	TDN
Naphthalene	NELAP	0.00300		ND	mg/L	1	10/22/04	TDN
Phenanthrene	NELAP	0.00060		ND	mg/L	1	10/22/04	TDN
Pyrene	NELAP	0.00030		ND	mg/L	1	10/22/04	TDN
Surr: Terphenyl-d14		62.5-135		92.2	%REC	1	10/22/04	TDN
<b><u>SW-846 5030. 8260B. VOLATILE ORGANIC COMPOUNDS BY GC/MS</u></b>								
1,1,1-Trichloroethane	NELAP	5.0		ND	µg/L	1	10/25/04 2:45:00 PM	RLH
1,1-Dichloroethane	NELAP	5.0		ND	µg/L	1	10/25/04 2:45:00 PM	RLH
1,2-Dibromoethane	NELAP	5.0		ND	µg/L	1	10/25/04 2:45:00 PM	RLH
1,2-Dichlorobenzene	NELAP	5.0		ND	µg/L	1	10/25/04 2:45:00 PM	RLH
1,2-Dichloroethane	NELAP	5.0		ND	µg/L	1	10/25/04 2:45:00 PM	RLH
1,3-Dichlorobenzene	NELAP	5.0		ND	µg/L	1	10/25/04 2:45:00 PM	RLH
1,4-Dichlorobenzene	NELAP	5.0		ND	µg/L	1	10/25/04 2:45:00 PM	RLH
2-Butanone	NELAP	25.0		ND	µg/L	1	10/25/04 2:45:00 PM	RLH

# TEKLAB, INC.

5445 HORSESHOE LAKE ROAD  
COLLINSVILLE, ILLINOIS 62234

ENVIRONMENTAL TESTING LABORATORY

TEL: 618-344-1004

FAX: 618-344-1005

## Laboratory Results

**CLIENT:** Clayton Group Services  
**WorkOrder:** 04100498  
**Lab ID:** 04100498-007  
**Report Date:** 04-Nov-04

**Client Project:** 15-03095.15-003  
**Client Sample ID:** EQB-001/041020  
**Collection Date:** 10/20/04 3:45:00 PM  
**Matrix:** GROUNDWATER

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Analyst
Benzene	NELAP	2.0		ND	µg/L	1	10/25/04 2:45:00 PM	RLH
Carbon disulfide	NELAP	5.0		ND	µg/L	1	10/25/04 2:45:00 PM	RLH
Chlorobenzene	NELAP	5.0		ND	µg/L	1	10/25/04 2:45:00 PM	RLH
Chloroform	NELAP	5.0		ND	µg/L	1	10/25/04 2:45:00 PM	RLH
Ethylbenzene	NELAP	5.0		ND	µg/L	1	10/25/04 2:45:00 PM	RLH
Methyl tert-butyl ether	NELAP	2.0		ND	µg/L	1	10/25/04 2:45:00 PM	RLH
Styrene	NELAP	5.0		ND	µg/L	1	10/25/04 2:45:00 PM	RLH
Tetrachloroethene	NELAP	5.0		ND	µg/L	1	10/25/04 2:45:00 PM	RLH
Toluene	NELAP	5.0		ND	µg/L	1	10/25/04 2:45:00 PM	RLH
Trichloroethene	NELAP	5.0		ND	µg/L	1	10/25/04 2:45:00 PM	RLH
Xylenes, Total	NELAP	5.0		ND	µg/L	1	10/25/04 2:45:00 PM	RLH
Sur: 1,2-Dichloroethane-d4		84.3-135		97.8	%REC	1	10/25/04 2:45:00 PM	RLH
Sur: 4-Bromofluorobenzene		81.1-113.3		102	%REC	1	10/25/04 2:45:00 PM	RLH
Sur: Dibromofluoromethane		88.9-121.2		97.0	%REC	1	10/25/04 2:45:00 PM	RLH
Sur: Toluene-d8		84.1-114.5		103	%REC	1	10/25/04 2:45:00 PM	RLH
<b><u>SW-846 7470A (TOTAL)</u></b>								
Mercury	NELAP	0.00020		< 0.00020	mg/L	1	10/28/04	JMW
<b><u>SW-846 8015B MODIFIED. 1,4-DIOXANE BY GC/FID</u></b>								
1,4-Dioxane		0.50		ND	mg/L	1	10/26/04 10:25:00 AM	DMH
<b><u>SW-846 9038 (TOTAL)</u></b>								
Sulfate, Turbidimetric	NELAP	5		< 5	mg/L	1	11/3/04	SMR
<b><u>SW-846 9040B</u></b>								
pH	NELAP	1.00		5.68		1	10/21/04 2:10:00 PM	SAK
<b><u>SW-846 9251 (TOTAL)</u></b>								
Chloride		1		< 1	mg/L	1	10/25/04 4:16:00 PM	SMR

# TEKLAB, INC.

5445 HORSESHOE LAKE ROAD  
COLLINSVILLE, ILLINOIS 62234

ENVIRONMENTAL TESTING LABORATORY

TEL: 618-344-1004  
FAX: 618-344-1005

## Laboratory Results

CLIENT: Clayton Group Services  
WorkOrder: 04100498  
Lab ID: 04100498-008  
Report Date: 04-Nov-04

Client Project: 15-03095.15-003  
Client Sample ID: TB-001/041018  
Collection Date: 10/18/04  
Matrix: TRIP BLANK

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Analyst
<b><u>SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS</u></b>								
1,1,1-Trichloroethane	NELAP	5.0		ND	µg/L	1	10/25/04 3:15:00 PM	RLH
1,1-Dichloroethane	NELAP	5.0		ND	µg/L	1	10/25/04 3:15:00 PM	RLH
1,2-Dibromoethane	NELAP	5.0		ND	µg/L	1	10/25/04 3:15:00 PM	RLH
1,2-Dichlorobenzene	NELAP	5.0		ND	µg/L	1	10/25/04 3:15:00 PM	RLH
1,2-Dichloroethane	NELAP	5.0		ND	µg/L	1	10/25/04 3:15:00 PM	RLH
1,3-Dichlorobenzene	NELAP	5.0		ND	µg/L	1	10/25/04 3:15:00 PM	RLH
1,4-Dichlorobenzene	NELAP	5.0		ND	µg/L	1	10/25/04 3:15:00 PM	RLH
2-Butanone	NELAP	25.0		ND	µg/L	1	10/25/04 3:15:00 PM	RLH
Benzene	NELAP	2.0		ND	µg/L	1	10/25/04 3:15:00 PM	RLH
Carbon disulfide	NELAP	5.0		ND	µg/L	1	10/25/04 3:15:00 PM	RLH
Chlorobenzene	NELAP	5.0		ND	µg/L	1	10/25/04 3:15:00 PM	RLH
Chloroform	NELAP	5.0		ND	µg/L	1	10/25/04 3:15:00 PM	RLH
Ethylbenzene	NELAP	5.0		ND	µg/L	1	10/25/04 3:15:00 PM	RLH
Methyl tert-butyl ether	NELAP	2.0		ND	µg/L	1	10/25/04 3:15:00 PM	RLH
Styrene	NELAP	5.0		ND	µg/L	1	10/25/04 3:15:00 PM	RLH
Tetrachloroethene	NELAP	5.0		ND	µg/L	1	10/25/04 3:15:00 PM	RLH
Toluene	NELAP	5.0		ND	µg/L	1	10/25/04 3:15:00 PM	RLH
Trichloroethene	NELAP	5.0		ND	µg/L	1	10/25/04 3:15:00 PM	RLH
Xylenes, Total	NELAP	5.0		ND	µg/L	1	10/25/04 3:15:00 PM	RLH
Sur: 1,2-Dichloroethane-d4		84.3-135		99.4	%REC	1	10/25/04 3:15:00 PM	RLH
Sur: 4-Bromofluorobenzene		81.1-113.3		100	%REC	1	10/25/04 3:15:00 PM	RLH
Sur: Dibromofluoromethane		88.9-121.2		98.0	%REC	1	10/25/04 3:15:00 PM	RLH
Sur: Toluene-d8		84.1-114.5		103	%REC	1	10/25/04 3:15:00 PM	RLH

# TEKLAB, INC.

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COLLINSVILLE, ILLINOIS 62234

ENVIRONMENTAL TESTING LABORATORY

TEL: 618-344-1004

FAX: 618-344-1005

**Client:** Clayton Group Services  
**Project:** 15-03095.15-003  
**Lab Order:** 04100498  
**Date Received:** 10/21/04

## WORK ORDER SAMPLE SUMMARY

**Date:** 04-Nov-04

Lab Sample ID	Client Sample ID	Tag Number	Collection Date
04100498-001A	HMW-25/041019		10/19/04 3:55:00 PM
04100498-001B	HMW-25/041019		10/19/04 3:55:00 PM
04100498-001C	HMW-25/041019		10/19/04 3:55:00 PM
04100498-001D	HMW-25/041019		10/19/04 3:55:00 PM
04100498-001E	HMW-25/041019		10/19/04 3:55:00 PM
04100498-001F	HMW-25/041019		10/19/04 3:55:00 PM
04100498-001G	HMW-25/041019		10/19/04 3:55:00 PM
04100498-001H	HMW-25/041019		10/19/04 3:55:00 PM
04100498-002A	HMW-26/041020		10/20/04 10:20:00 AM
04100498-002B	HMW-26/041020		10/20/04 10:20:00 AM
04100498-002C	HMW-26/041020		10/20/04 10:20:00 AM
04100498-002D	HMW-26/041020		10/20/04 10:20:00 AM
04100498-002E	HMW-26/041020		10/20/04 10:20:00 AM
04100498-002F	HMW-26/041020		10/20/04 10:20:00 AM
04100498-002G	HMW-26/041020		10/20/04 10:20:00 AM
04100498-002H	HMW-26/041020		10/20/04 10:20:00 AM
04100498-003A	HMW-27/041020		10/20/04 1:45:00 PM
04100498-003B	HMW-27/041020		10/20/04 1:45:00 PM
04100498-003C	HMW-27/041020		10/20/04 1:45:00 PM
04100498-003D	HMW-27/041020		10/20/04 1:45:00 PM
04100498-003E	HMW-27/041020		10/20/04 1:45:00 PM
04100498-003F	HMW-27/041020		10/20/04 1:45:00 PM
04100498-003G	HMW-27/041020		10/20/04 1:45:00 PM
04100498-003H	HMW-27/041020		10/20/04 1:45:00 PM
04100498-004A	HMW-28/041020		10/20/04 4:40:00 PM
04100498-004B	HMW-28/041020		10/20/04 4:40:00 PM
04100498-004C	HMW-28/041020		10/20/04 4:40:00 PM
04100498-004D	HMW-28/041020		10/20/04 4:40:00 PM
04100498-004E	HMW-28/041020		10/20/04 4:40:00 PM
04100498-004F	HMW-28/041020		10/20/04 4:40:00 PM
04100498-004G	HMW-28/041020		10/20/04 4:40:00 PM
04100498-004H	HMW-28/041020		10/20/04 4:40:00 PM
04100498-005A	HMW-29/041020		10/20/04 6:30:00 PM
04100498-005B	HMW-29/041020		10/20/04 6:30:00 PM
04100498-005C	HMW-29/041020		10/20/04 6:30:00 PM

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5445 HORSESHOE LAKE ROAD  
COLLINSVILLE, ILLINOIS 62234

ENVIRONMENTAL TESTING LABORATORY

TEL: 618-344-1004

FAX: 618-344-1005

Client: Clayton Group Services  
Project: 15-03095.15-003  
Lab Order: 04100498  
Date Received: 10/21/04

## WORK ORDER SAMPLE SUMMARY

Date: 04-Nov-04

Lab Sample ID	Client Sample ID	Tag Number	Collection Date
04100498-005D	HMW-29/041020		10/20/04 6:30:00 PM
04100498-005E	HMW-29/041020		10/20/04 6:30:00 PM
04100498-005F	HMW-29/041020		10/20/04 6:30:00 PM
04100498-005G	HMW-29/041020		10/20/04 6:30:00 PM
04100498-005H	HMW-29/041020		10/20/04 6:30:00 PM
04100498-006A	Dup-001/041020		10/20/04
04100498-006B	Dup-001/041020		10/20/04
04100498-006C	Dup-001/041020		10/20/04
04100498-006D	Dup-001/041020		10/20/04
04100498-006E	Dup-001/041020		10/20/04
04100498-006F	Dup-001/041020		10/20/04
04100498-006G	Dup-001/041020		10/20/04
04100498-006H	Dup-001/041020		10/20/04
04100498-007A	EQB-001/041020		10/20/04 3:45:00 PM
04100498-007B	EQB-001/041020		10/20/04 3:45:00 PM
04100498-007C	EQB-001/041020		10/20/04 3:45:00 PM
04100498-007D	EQB-001/041020		10/20/04 3:45:00 PM
04100498-007E	EQB-001/041020		10/20/04 3:45:00 PM
04100498-007F	EQB-001/041020		10/20/04 3:45:00 PM
04100498-007G	EQB-001/041020		10/20/04 3:45:00 PM
04100498-007H	EQB-001/041020		10/20/04 3:45:00 PM
04100498-008A	TB-001/041018		10/18/04

# TEKLAB, INC.

5445 HORSESHOE LAKE ROAD  
COLLINSVILLE, ILLINOIS 62234

ENVIRONMENTAL TESTING LABORATORY

TEL: 618-344-1004

FAX: 618-344-1005

Client: Clayton Group Services

Project: 15-03095.15-003

Lab Order: 04100498

Date Received: 10/21/04 10:40:00 AM

## DATES REPORT

Date: 04-Nov-04

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
04100498-001A	HMW-25/041019	10/19/04	Groundwater	BNAs, Aqueous, by GC/MS		10/25/04	10/26/04
				PNAs, Aqueous, by HPLC		10/22/04	10/22/04
04100498-001B				Alkalinity, Total (as CaCO <sub>3</sub> ), Aqueous			10/25/04
				Chloride, Aqueous (Total)			11/1/04
				Hardness, (as CaCO <sub>3</sub> ), Aqueous			10/25/04
				pH, Aqueous			10/21/04
				Sulfate, Aqueous (Total)			10/25/04
				Total Dissolved Solids, Aqueous			10/22/04
				Total Suspended solids, Aqueous			10/22/04
04100498-001C				Mercury, Aqueous, (Total)	10/27/04		10/27/04
				Metals, Aqueous, by GFAA (Total)	10/22/04		10/27/04
				Metals, Aqueous, by GFAA (Total)	10/22/04		10/29/04
				Metals, Aqueous, by GFAA (Total)	10/22/04		10/28/04
				Metals, Aqueous, by GFAA (Total)	10/22/04		10/26/04
				Metals, Aqueous, by ICP (Total)	10/22/04		11/1/04
04100498-001D				Cyanide, Aqueous (Total)			10/21/04
04100498-001E				Sulfide, Colorimetric, Aqueous (Total)			10/25/04
04100498-001F				COD, Aqueous (Total)			10/22/04
04100498-001G				1,4-Dioxane, Aqueous, by GC/FID			10/25/04
04100498-001H				Volatile Organics, Aqueous, by GC/MS	10/21/04		10/21/04
04100498-002A	HMW-26/041020	10/20/04		BNAs, Aqueous, by GC/MS		10/25/04	10/27/04
				PNAs, Aqueous, by HPLC		10/22/04	10/22/04
04100498-002B				Alkalinity, Total (as CaCO <sub>3</sub> ), Aqueous			10/25/04
				Chloride, Aqueous (Total)			10/25/04
				Hardness, (as CaCO <sub>3</sub> ), Aqueous			10/25/04
				pH, Aqueous			10/21/04
				Sulfate, Aqueous (Total)			10/25/04
				Total Dissolved Solids, Aqueous			10/22/04
				Total Suspended solids, Aqueous			10/22/04
04100498-002C				Mercury, Aqueous, (Total)	10/27/04		10/27/04
				Metals, Aqueous, by GFAA (Total)	10/22/04		10/27/04
				Metals, Aqueous, by GFAA (Total)	10/22/04		10/27/04
				Metals, Aqueous, by GFAA (Total)	10/22/04		10/29/04
				Metals, Aqueous, by GFAA (Total)	10/22/04		11/1/04
				Metals, Aqueous, by ICP (Total)	10/22/04		11/1/04
04100498-002D				Cyanide, Aqueous (Total)			10/21/04

# TEKLAB, INC.

5445 HORSESHOE LAKE ROAD  
COLLINSVILLE, ILLINOIS 62234

ENVIRONMENTAL TESTING LABORATORY

TEL: 618-344-1004  
FAX: 618-344-1005

Client: Clayton Group Services  
Project: 15-03095.15-003  
Lab Order: 04100498  
Date Received: 10/21/04 10:40:00 AM

## DATES REPORT

Date: 04-Nov-04

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
04100498-002E	HMW-26/041020	10/20/04	Groundwater	Sulfide, Colorimetric, Aqueous (Total)			10/25/04
04100498-002F				COD, Aqueous (Total)			10/22/04
04100498-002G				1,4-Dioxane, Aqueous, by GC/FID			10/25/04
04100498-002H				Volatile Organics, Aqueous, by GC/MS	10/21/04		10/21/04
04100498-003A	HMW-27/041020			BNAs, Aqueous, by GC/MS	10/25/04		10/27/04
				PNAs, Aqueous, by HPLC	10/22/04		10/22/04
04100498-003B				Alkalinity, Total (as CaCO <sub>3</sub> ), Aqueous			10/25/04
				Alkalinity, Total (as CaCO <sub>3</sub> ), Aqueous			11/2/04
				Chloride, Aqueous (Total)			10/25/04
				Hardness, (as CaCO <sub>3</sub> ), Aqueous			10/25/04
				pH, Aqueous			10/21/04
				Sulfate, Aqueous (Total)			10/25/04
				Total Dissolved Solids, Aqueous			10/22/04
				Total Suspended solids, Aqueous			10/22/04
04100498-003C				Mercury, Aqueous, (Total)	10/27/04		10/27/04
				Metals, Aqueous, by GFAA (Total)	10/22/04		10/28/04
				Metals, Aqueous, by GFAA (Total)	10/22/04		10/29/04
				Metals, Aqueous, by GFAA (Total)	10/22/04		10/27/04
				Metals, Aqueous, by GFAA (Total)	10/22/04		10/29/04
				Metals, Aqueous, by ICP (Total)	10/22/04		11/1/04
04100498-003D				Cyanide, Aqueous (Total)			10/21/04
04100498-003E				Sulfide, Colorimetric, Aqueous (Total)			10/25/04
04100498-003F				COD, Aqueous (Total)			10/22/04
04100498-003G				1,4-Dioxane, Aqueous, by GC/FID			10/25/04
04100498-003H				Volatile Organics, Aqueous, by GC/MS	10/21/04		10/21/04
04100498-004A	HMW-28/041020			BNAs, Aqueous, by GC/MS	10/25/04		10/27/04
				PNAs, Aqueous, by HPLC	10/22/04		10/22/04
04100498-004B				Alkalinity, Total (as CaCO <sub>3</sub> ), Aqueous			10/25/04
				Chloride, Aqueous (Total)			10/25/04
				Hardness, (as CaCO <sub>3</sub> ), Aqueous			10/25/04
				pH, Aqueous			10/21/04
				Sulfate, Aqueous (Total)			10/25/04
				Total Dissolved Solids, Aqueous			10/22/04
				Total Suspended solids, Aqueous			10/22/04
04100498-004C				Mercury, Aqueous, (Total)	10/27/04		10/27/04
				Metals, Aqueous, by GFAA (Total)	10/22/04		10/27/04

# TEKLAB, INC.

5445 HORSESHOE LAKE ROAD  
COLLINSVILLE, ILLINOIS 62234

ENVIRONMENTAL TESTING LABORATORY

TEL: 618-344-1004

FAX: 618-344-1005

Client: Clayton Group Services

Project: 15-03095.15-003

Lab Order: 04100498

Date Received: 10/21/04 10:40:00 AM

## DATES REPORT

Date: 04-Nov-04

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
04100498-004C	HMW-28/041020	10/20/04	Groundwater	Metals, Aqueous, by GFAA (Total)		10/22/04	10/29/04
				Metals, Aqueous, by GFAA (Total)		10/22/04	10/28/04
				Metals, Aqueous, by GFAA (Total)		10/22/04	10/27/04
				Metals, Aqueous, by ICP (Total)		10/22/04	11/1/04
04100498-004D				Cyanide, Aqueous (Total)			10/21/04
04100498-004E				Sulfide, Colorimetric, Aqueous (Total)			10/25/04
04100498-004F				COD, Aqueous (Total)			10/22/04
04100498-004G				1,4-Dioxane, Aqueous, by GC/FID			10/25/04
04100498-004H				Volatile Organics, Aqueous, by GC/MS		10/25/04	10/25/04
04100498-005A	HMW-29/041020			BNAs, Aqueous, by GC/MS		10/25/04	10/27/04
				PNAs, Aqueous, by HPLC		10/22/04	10/22/04
04100498-005B				Alkalinity, Total (as CaCO <sub>3</sub> ), Aqueous			10/25/04
				Chloride, Aqueous (Total)			10/25/04
				Hardness, (as CaCO <sub>3</sub> ), Aqueous			10/25/04
				pH, Aqueous			10/21/04
				Sulfate, Aqueous (Total)			10/25/04
				Total Dissolved Solids, Aqueous			10/22/04
				Total Suspended solids, Aqueous			10/22/04
04100498-005C				Mercury, Aqueous, (Total)		10/27/04	10/27/04
				Metals, Aqueous, by GFAA (Total)		10/22/04	10/27/04
				Metals, Aqueous, by GFAA (Total)		10/22/04	10/27/04
				Metals, Aqueous, by GFAA (Total)		10/22/04	10/29/04
				Metals, Aqueous, by GFAA (Total)		10/22/04	10/28/04
				Metals, Aqueous, by ICP (Total)		10/22/04	11/1/04
04100498-005D				Cyanide, Aqueous (Total)			10/21/04
04100498-005E				Sulfide, Colorimetric, Aqueous (Total)			10/25/04
04100498-005F				COD, Aqueous (Total)			10/22/04
04100498-005G				1,4-Dioxane, Aqueous, by GC/FID			10/26/04
04100498-005H				Volatile Organics, Aqueous, by GC/MS		10/25/04	10/25/04
04100498-006A	Dup-001/041020			BNAs, Aqueous, by GC/MS		10/25/04	10/27/04
				PNAs, Aqueous, by HPLC		10/22/04	10/22/04
04100498-006B				Alkalinity, Total (as CaCO <sub>3</sub> ), Aqueous			10/25/04
				Chloride, Aqueous (Total)			10/29/04
				Hardness, (as CaCO <sub>3</sub> ), Aqueous			10/25/04
				pH, Aqueous			10/21/04
				Sulfate, Aqueous (Total)			10/25/04

# TEKLAB, INC.

5445 HORSESHOE LAKE ROAD  
COLLINSVILLE, ILLINOIS 62234

ENVIRONMENTAL TESTING LABORATORY

TEL: 618-344-1004  
FAX: 618-344-1005

**Client:** Clayton Group Services  
**Project:** 15-03095.15-003  
**Lab Order:** 04100498  
**Date Received:** 10/21/04 10:40:00 AM

## DATES REPORT

**Date:** 04-Nov-04

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
04100498-006B	Dup-001/041020	10/20/04	Groundwater	Total Dissolved Solids, Aqueous Total Suspended solids, Aqueous			10/22/04
04100498-006C				Mercury, Aqueous, (Total) Metals, Aqueous, by GFAA (Total)	10/27/04	10/28/04	10/27/04
				Metals, Aqueous, by GFAA (Total) Metals, Aqueous, by GFAA (Total)	10/22/04	10/27/04	10/29/04
				Metals, Aqueous, by GFAA (Total) Metals, Aqueous, by ICP (Total)	10/22/04	10/28/04	10/28/04
04100498-006D				Cyanide, Aqueous (Total)			10/21/04
04100498-006E				Sulfide, Colorimetric, Aqueous (Total)			10/25/04
04100498-006F				COD, Aqueous (Total)			10/22/04
04100498-006G				1,4-Dioxane, Aqueous, by GC/FID			10/26/04
04100498-006H				Volatile Organics, Aqueous, by GC/MS	10/25/04	10/25/04	
04100498-007A	EQB-001/041020			BNAs, Aqueous, by GC/MS	10/25/04	10/27/04	
				PNAs, Aqueous, by HPLC	10/22/04	10/22/04	
04100498-007B				Alkalinity, Total (as CaCO <sub>3</sub> ), Aqueous			10/25/04
				Chloride, Aqueous (Total)			10/25/04
				Hardness, (as CaCO <sub>3</sub> ), Aqueous			10/25/04
				pH, Aqueous			10/21/04
				Sulfate, Turbidimetric, Aqueous (Total)			11/3/04
				Total Dissolved Solids, Aqueous			10/22/04
				Total Suspended solids, Aqueous			10/22/04
04100498-007C				Mercury, Aqueous, (Total)	10/27/04	10/28/04	
				Metals, Aqueous, by GFAA (Total)	10/22/04	10/29/04	
				Metals, Aqueous, by GFAA (Total)	10/22/04	10/28/04	
				Metals, Aqueous, by GFAA (Total)	10/22/04	10/27/04	
				Metals, Aqueous, by GFAA (Total)	10/22/04	10/27/04	
				Metals, Aqueous, by ICP (Total)	10/22/04	11/1/04	
04100498-007D				Cyanide, Aqueous (Total)			10/21/04
04100498-007E				Sulfide, Colorimetric, Aqueous (Total)			10/25/04
04100498-007F				COD, Aqueous (Total)			10/22/04
04100498-007G				1,4-Dioxane, Aqueous, by GC/FID			10/26/04
04100498-007H				Volatile Organics, Aqueous, by GC/MS	10/25/04	10/25/04	
04100498-008A	TB-001/041018	10/18/04	Trip Blank	Volatile Organics, Aqueous, by GC/MS	10/25/04	10/25/04	

TEKLAB, INC

Date: 04-Nov-04

CLIENT: Clayton Group Services  
 Work Order: 04100498  
 Project: 15-03095.15-003

## ANALYTICAL QC SUMMARY REPORT

TestCode: A\_CHLORIDE\_S\_AT

Sample ID: MBLK	SampType: MBLK	TestCode: A_CHLORIDE_S_ Units: mg/L			Prep Date:		Run ID: AUTOANALYZER 2_041				
Client ID: ZZZZZ	Batch ID: R57322	TestNo: SW9251			Analysis Date: 10/25/04		SeqNo: 858124				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	< 1	1									
Sample ID: MBLK	SampType: MBLK	TestCode: A_CHLORIDE_S_ Units: mg/L			Prep Date:		Run ID: AUTOANALYZER 2_041				
Client ID: ZZZZZ	Batch ID: R57506	TestNo: SW9251			Analysis Date: 10/29/04		SeqNo: 861455				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	< 1	1									
Sample ID: MBLK	SampType: MBLK	TestCode: A_CHLORIDE_S_ Units: mg/L			Prep Date:		Run ID: AUTOANALYZER 2_041				
Client ID: ZZZZZ	Batch ID: R57538	TestNo: SW9251			Analysis Date: 11/1/04		SeqNo: 862046				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	< 1	1									
Sample ID: LCS	SampType: LCS	TestCode: A_CHLORIDE_S_ Units: mg/L			Prep Date:		Run ID: AUTOANALYZER 2_041				
Client ID: ZZZZZ	Batch ID: R57322	TestNo: SW9251			Analysis Date: 10/25/04		SeqNo: 858127				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	13	1	12	0	108	90	110	0	0	0	
Sample ID: LCS	SampType: LCS	TestCode: A_CHLORIDE_S_ Units: mg/L			Prep Date:		Run ID: AUTOANALYZER 2_041				
Client ID: ZZZZZ	Batch ID: R57506	TestNo: SW9251			Analysis Date: 10/29/04		SeqNo: 861457				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	13	1	12	0	108	90	110	0	0	0	

Qualifiers: ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits  
 R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

CLIENT: Clayton Group Services  
Work Order: 04100498  
Project: 15-03095.15-003

## ANALYTICAL QC SUMMARY REPORT

TestCode: A\_CHLORIDE\_S\_AT

Sample ID: LCS	SampType: LCS	TestCode: A_CHLORIDE_S_	Units: mg/L	Prep Date:			Run ID: AUTOANALYZER 2_041				
Client ID: ZZZZZ	Batch ID: R57538	TestNo: SW9251		Analysis Date: 11/1/04			SeqNo: 862048				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	13	1	12	0	108	90	110	0	0		
Sample ID: 04100498-001B MS	SampType: MS	TestCode: A_CHLORIDE_S_	Units: mg/L	Prep Date:			Run ID: AUTOANALYZER 2_041				
Client ID: HMW-25/041019	Batch ID: R57538	TestNo: SW9251		Analysis Date: 11/1/04			SeqNo: 862085				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	278	20	200	96	91	85	115	0	0		
Sample ID: 04100498-001B MSD	SampType: MSD	TestCode: A_CHLORIDE_S_	Units: mg/L	Prep Date:			Run ID: AUTOANALYZER 2_041				
Client ID: HMW-25/041019	Batch ID: R57538	TestNo: SW9251		Analysis Date: 11/1/04			SeqNo: 862086				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	282	20	200	96	93	85	115	278	1.43	15	

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

CLIENT: Clayton Group Services  
Work Order: 04100498  
Project: 15-03095.15-003

## ANALYTICAL QC SUMMARY REPORT

TestCode: A\_SO4\_S\_AT

Sample ID: MBLK	SampType: MBLK	TestCode: A_SO4_S_AT	Units: mg/L	Prep Date:	Run ID: AUTOANALYZER 3_041
Client ID: ZZZZZ	Batch ID: R57318	TestNo: SW9036		Analysis Date: 10/25/04	SeqNo: 857993
<hr/>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Sulfate	< 5	5			
Sample ID: LCS	SampType: LCS	TestCode: A_SO4_S_AT	Units: mg/L	Prep Date:	Run ID: AUTOANALYZER 3_041
Client ID: ZZZZZ	Batch ID: R57318	TestNo: SW9036		Analysis Date: 10/25/04	SeqNo: 857995
<hr/>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Sulfate	20	5	20	0	100 90 110 0 0
Sample ID: 04100498-001B MS	SampType: MS	TestCode: A_SO4_S_AT	Units: mg/L	Prep Date:	Run ID: AUTOANALYZER 3_041
Client ID: HMW-25/041019	Batch ID: R57318	TestNo: SW9036		Analysis Date: 10/25/04	SeqNo: 858002
<hr/>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Sulfate	159	25	100	57	102 85 115 0 0
Sample ID: 04100498-001B MSD	SampType: MSD	TestCode: A_SO4_S_AT	Units: mg/L	Prep Date:	Run ID: AUTOANALYZER 3_041
Client ID: HMW-25/041019	Batch ID: R57318	TestNo: SW9036		Analysis Date: 10/25/04	SeqNo: 858003
<hr/>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Sulfate	166	25	100	57	109 85 115 159 4.31 10

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

CLIENT: Clayton Group Services  
Work Order: 04100498  
Project: 15-03095.15-003

## ANALYTICAL QC SUMMARY REPORT

TestCode: A\_TCN\_S\_AT

Sample ID: MB-R57185	SampType: MBLK	TestCode: A_TCN_S_AT	Units: mg/L	Prep Date:			Run ID: AUTOANALYZER 1_041				
Client ID: ZZZZZ	Batch ID: R57185	TestNo: SW9012A		Analysis Date: 10/21/04			SeqNo: 862128				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cyanide	< 0.007	0.007									
Sample ID: LCS-R57185	SampType: LCS	TestCode: A_TCN_S_AT	Units: mg/L	Prep Date:			Run ID: AUTOANALYZER 1_041				
Client ID: ZZZZZ	Batch ID: R57185	TestNo: SW9012A		Analysis Date: 10/21/04			SeqNo: 862129				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cyanide	0.104	0.007	0.1	0	104	85	115	0	0		
Sample ID: 04100498-001D MS	SampType: MS	TestCode: A_TCN_S_AT	Units: mg/L	Prep Date:			Run ID: AUTOANALYZER 1_041				
Client ID: HMW-25/041019	Batch ID: R57185	TestNo: SW9012A		Analysis Date: 10/21/04			SeqNo: 855829				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cyanide	0.106	0.007	0.1	0	106	85	115	0	0		
Sample ID: 04100498-001D MSD	SampType: MSD	TestCode: A_TCN_S_AT	Units: mg/L	Prep Date:			Run ID: AUTOANALYZER 1_041				
Client ID: HMW-25/041019	Batch ID: R57185	TestNo: SW9012A		Analysis Date: 10/21/04			SeqNo: 855830				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cyanide	0.112	0.007	0.1	0	112	85	115	0.106	5.51	15	

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

CLIENT: Clayton Group Services  
Work Order: 04100498  
Project: 15-03095.15-003

## ANALYTICAL QC SUMMARY REPORT

TestCode: I\_ALK\_M\_AT

Sample ID: MB-R57273	SampType: MBLK	TestCode: I_ALK_M_AT	Units: mg/L	Prep Date:	Run ID: PH METER- ING. _04102						
Client ID: ZZZZZ	Batch ID: R57273	TestNo: M2320 B (T)		Analysis Date: 10/25/04	SeqNo: 856961						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total (as CaCO3)	< 0	0									
Sample ID: MB-R57580	SampType: MBLK	TestCode: I_ALK_M_AT	Units: mg/L	Prep Date:	Run ID: PH METER- ING. _04110						
Client ID: ZZZZZ	Batch ID: R57580	TestNo: M2320 B (T)		Analysis Date: 11/2/04	SeqNo: 862871						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total (as CaCO3)	< 0	0									
Sample ID: LCS-R57273	SampType: LCS	TestCode: I_ALK_M_AT	Units: mg/L	Prep Date:	Run ID: PH METER- ING. _04102						
Client ID: ZZZZZ	Batch ID: R57273	TestNo: M2320 B (T)		Analysis Date: 10/25/04	SeqNo: 856962						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total (as CaCO3)	238	0	238	0	100	90	110	0	0	0	
Sample ID: LCS-R57580	SampType: LCS	TestCode: I_ALK_M_AT	Units: mg/L	Prep Date:	Run ID: PH METER- ING. _04110						
Client ID: ZZZZZ	Batch ID: R57580	TestNo: M2320 B (T)		Analysis Date: 11/2/04	SeqNo: 862872						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total (as CaCO3)	238	0	238	0	100	90	110	0	0	0	
Sample ID: 04100498-003B MS	SampType: MS	TestCode: I_ALK_M_AT	Units: mg/L	Prep Date:	Run ID: PH METER- ING. _04110						
Client ID: HMW-27/041020	Batch ID: R57580	TestNo: M2320 B (T)		Analysis Date: 11/2/04	SeqNo: 863737						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total (as CaCO3)	720	0	95	628	96.8	85	115	0	0	0	
Sample ID: 04100498-003B MSD	SampType: MSD	TestCode: I_ALK_M_AT	Units: mg/L	Prep Date:	Run ID: PH METER- ING. _04110						
Client ID: HMW-27/041020	Batch ID: R57580	TestNo: M2320 B (T)		Analysis Date: 11/2/04	SeqNo: 863738						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

CLIENT: Clayton Group Services  
Work Order: 04100498  
Project: 15-03095.15-003

## ANALYTICAL QC SUMMARY REPORT

TestCode: I\_ALK\_M\_AT

Sample ID: 04100498-003B MSD	SampType: MSD	TestCode: I_ALK_M_AT	Units: mg/L	Prep Date:	Run ID: PH METER- ING. 04110						
Client ID: HMW-27/041020	Batch ID: R57580	TestNo: M2320 B (T)		Analysis Date: 11/2/04	SeqNo: 663738						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total (as CaCO3)	724	0	95	628	101	85	115	720	0.554	10	

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

CLIENT: Clayton Group Services  
Work Order: 04100498  
Project: 15-03095.15-003

## ANALYTICAL QC SUMMARY REPORT

TestCode: I\_COD\_M\_AT

Sample ID: MB-R57210	SampType: MBLK	TestCode: I_COD_M_AT	Units: mg/L	Prep Date:	Run ID: DR2010_041022A						
Client ID: ZZZZZ	Batch ID: R57210	TestNo: M5220 D		Analysis Date: 10/22/04	SeqNo: 856136						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chemical Oxygen Demand	< 20	20									
Sample ID: LCS-R57210	SampType: LCS	TestCode: I_COD_M_AT	Units: mg/L	Prep Date:	Run ID: DR2010_041022A						
Client ID: ZZZZZ	Batch ID: R57210	TestNo: M5220 D		Analysis Date: 10/22/04	SeqNo: 856137						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chemical Oxygen Demand	106	20	100	0	106	81.9	109	0	0	0	
Sample ID: 04100498-007F MS	SampType: MS	TestCode: I_COD_M_AT	Units: mg/L	Prep Date:	Run ID: DR2010_041022A						
Client ID: EQB-001/041020	Batch ID: R57210	TestNo: M5220 D		Analysis Date: 10/22/04	SeqNo: 856151						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chemical Oxygen Demand	1040	40	1000	7	103	85	115	0	0	0	
Sample ID: 04100498-007F MSD	SampType: MSD	TestCode: I_COD_M_AT	Units: mg/L	Prep Date:	Run ID: DR2010_041022A						
Client ID: EQB-001/041020	Batch ID: R57210	TestNo: M5220 D		Analysis Date: 10/22/04	SeqNo: 856152						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chemical Oxygen Demand	1000	40	1000	7	99.3	85	115	1040	3.92	10	

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

CLIENT: Clayton Group Services  
Work Order: 04100498  
Project: 15-03095.15-003

## ANALYTICAL QC SUMMARY REPORT

TestCode: I\_HARD\_M\_AT

Sample ID: MB-R57269	SampType: MBLK	TestCode: I_HARD_M_AT	Units: mg/L	Prep Date:	Run ID: INORGANICS_041025B						
Client ID: ZZZZZ	Batch ID: R57269	TestNo: M2340C		Analysis Date: 10/25/04	SeqNo: 856857						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hardness, as ( CaCO3 )	< 5	5									
Sample ID: LCS-R57269	SampType: LCS	TestCode: I_HARD_M_AT	Units: mg/L	Prep Date:	Run ID: INORGANICS_041025B						
Client ID: ZZZZZ	Batch ID: R57269	TestNo: M2340C		Analysis Date: 10/25/04	SeqNo: 856858						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hardness, as ( CaCO3 )	1000	5	1000	0	100	90	110	0	0	0	
Sample ID: 04100498-003B MS	SampType: MS	TestCode: I_HARD_M_AT	Units: mg/L	Prep Date:	Run ID: INORGANICS_041025B						
Client ID: HMW-27/041020	Batch ID: R57269	TestNo: M2340C		Analysis Date: 10/25/04	SeqNo: 856867						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hardness, as ( CaCO3 )	1020	5	200	830	95	85	115	0	0	0	
Sample ID: 04100498-003B MSD	SampType: MSD	TestCode: I_HARD_M_AT	Units: mg/L	Prep Date:	Run ID: INORGANICS_041025B						
Client ID: HMW-27/041020	Batch ID: R57269	TestNo: M2340C		Analysis Date: 10/25/04	SeqNo: 856876						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hardness, as ( CaCO3 )	1050	5	200	830	110	85	115	1020	2.90	10	

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

CLIENT: Clayton Group Services  
Work Order: 04100498  
Project: 15-03095.15-003

## ANALYTICAL QC SUMMARY REPORT

TestCode: I\_SO4\_S\_AT

Sample ID: MB-R57620	SampType: MBLK	TestCode: I_SO4_S_AT	Units: mg/L	Prep Date:	Run ID: DR2000_041103A						
Client ID: ZZZZZ	Batch ID: R57620	TestNo: SW9038		Analysis Date: 11/3/04	SeqNo: 863676						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate, Turbidimetric	< 5	5									
Sample ID: LCS-R57620	SampType: LCS	TestCode: I_SO4_S_AT	Units: mg/L	Prep Date:	Run ID: DR2000_041103A						
Client ID: ZZZZZ	Batch ID: R57620	TestNo: SW9038		Analysis Date: 11/3/04	SeqNo: 863677						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate, Turbidimetric	21	5	20	0	105	90	110	0	0	0	
Sample ID: 04100498-007B MS	SampType: MS	TestCode: I_SO4_S_AT	Units: mg/L	Prep Date:	Run ID: DR2000_041103A						
Client ID: EQB-001/041020	Batch ID: R57620	TestNo: SW9038		Analysis Date: 11/3/04	SeqNo: 863679						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate, Turbidimetric	22	5	20	0	110	85	115	0	0	0	

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

CLIENT: Clayton Group Services  
Work Order: 04100498  
Project: 15-03095.15-003

## ANALYTICAL QC SUMMARY REPORT

TestCode: I\_SUL\_M\_AT

Sample ID: MB-R57284	SampType: MBLK	TestCode: I_SUL_M_AT	Units: mg/L	Prep Date:	Run ID: DR2010_041025A						
Client ID: ZZZZZ	Batch ID: R57284	TestNo: M4500-S D		Analysis Date: 10/25/04	SeqNo: 857079						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfide, Total - Colorimetric	<0:05	0.05									
Sample ID: LCS-R57284	SampType: LCS	TestCode: I_SUL_M_AT	Units: mg/L	Prep Date:	Run ID: DR2010_041025A						
Client ID: ZZZZZ	Batch ID: R57284	TestNo: M4500-S D		Analysis Date: 10/25/04	SeqNo: 857080						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfide, Total - Colorimetric	0.59	0.05	0.67	0	88.1	85	115	0	0		
Sample ID: 04100498-001EMS	SampType: MS	TestCode: I_SUL_M_AT	Units: mg/L	Prep Date:	Run ID: DR2010_041025A						
Client ID: HMW-25/041019	Batch ID: R57284	TestNo: M4500-S D		Analysis Date: 10/25/04	SeqNo: 857084						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfide, Total - Colorimetric	0.59	0.05	0.67	0.02	85.1	80	120	0	0		
Sample ID: 04100498-002EMS	SampType: MS	TestCode: I_SUL_M_AT	Units: mg/L	Prep Date:	Run ID: DR2010_041025A						
Client ID: HMW-26/041020	Batch ID: R57284	TestNo: M4500-S D		Analysis Date: 10/25/04	SeqNo: 857087						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfide, Total - Colorimetric	0.68	0.05	0.67	0.02	98.5	80	120	0	0		
Sample ID: 04100498-003EMS	SampType: MS	TestCode: I_SUL_M_AT	Units: mg/L	Prep Date:	Run ID: DR2010_041025A						
Client ID: HMW-27/041020	Batch ID: R57284	TestNo: M4500-S D		Analysis Date: 10/25/04	SeqNo: 857089						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfide, Total - Colorimetric	0.6	0.05	0.67	0.03	85.1	80	120	0	0		
Sample ID: 04100498-006EMS	SampType: MS	TestCode: I_SUL_M_AT	Units: mg/L	Prep Date:	Run ID: DR2010_041025A						
Client ID: Dup-001/041020	Batch ID: R57284	TestNo: M4500-S D		Analysis Date: 10/25/04	SeqNo: 857091						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Qualifiers: ND - Not Detected at the Reporting Limit      S - Spike Recovery outside accepted recovery limits      B - Analyte detected in the associated Method Blank  
J - Analyte detected below quantitation limits      R - RPD outside accepted recovery limits

CLIENT: Clayton Group Services  
Work Order: 04100498  
Project: 15-03095.15-003

## ANALYTICAL QC SUMMARY REPORT

TestCode: I\_SUL\_M\_AT

Sample ID:	04100498-006EMS	SampType:	MS	TestCode:	I_SUL_M_AT	Units:	mg/L	Prep Date:		Run ID:	DR2010_041025A	
Client ID:	Dup-001/041020	Batch ID:	R57284	TestNo:	M4500-S D <th></th> <th></th> <th>Analysis Date:</th> <td>10/25/04</td> <th>SeqNo:</th> <td>857091</td>			Analysis Date:	10/25/04	SeqNo:	857091	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfide, Total - Colorimetric		0.67	0.05	0.67	0.03	95.5	80	120	0	0	0	
Sample ID:	04100498-007EMS	SampType:	MS	TestCode:	I_SUL_M_AT	Units:	mg/L	Prep Date:		Run ID:	DR2010_041025A	
Client ID:	EQB-001/041020 <th>Batch ID:</th> <td>R57284</td> <th>TestNo:</th> <td>M4500-S D<th></th><th></th><th>Analysis Date:</th><td>10/25/04</td><th>SeqNo:</th><td>857093</td></td>	Batch ID:	R57284	TestNo:	M4500-S D <th></th> <th></th> <th>Analysis Date:</th> <td>10/25/04</td> <th>SeqNo:</th> <td>857093</td>			Analysis Date:	10/25/04	SeqNo:	857093	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfide, Total - Colorimetric		0.64	0.05	0.67	0.02	92.5	80	120	0	0	0	
Sample ID:	04100498-004EMS	SampType:	MS	TestCode:	I_SUL_M_AT	Units:	mg/L	Prep Date:		Run ID:	DR2010_041025A	
Client ID:	HMW-28/041020 <th>Batch ID:</th> <td>R57284<th>TestNo:</th><td>M4500-S D<th></th><th></th><th>Analysis Date:</th><td>10/25/04</td><th>SeqNo:</th><td>857105</td></td></td>	Batch ID:	R57284 <th>TestNo:</th> <td>M4500-S D<th></th><th></th><th>Analysis Date:</th><td>10/25/04</td><th>SeqNo:</th><td>857105</td></td>	TestNo:	M4500-S D <th></th> <th></th> <th>Analysis Date:</th> <td>10/25/04</td> <th>SeqNo:</th> <td>857105</td>			Analysis Date:	10/25/04	SeqNo:	857105	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfide, Total - Colorimetric		5.4	0.50	6.7	0	80.6	80	120	0	0	0	
Sample ID:	04100498-005EMSD	SampType:	MS	TestCode:	I_SUL_M_AT	Units:	mg/L	Prep Date:		Run ID:	DR2010_041025A	
Client ID:	HMW-29/041020 <th>Batch ID:</th> <td>R57284<th>TestNo:</th><td>M4500-S D<th></th><th></th><th>Analysis Date:</th><td>10/25/04</td><th>SeqNo:</th><td>857111</td></td></td>	Batch ID:	R57284 <th>TestNo:</th> <td>M4500-S D<th></th><th></th><th>Analysis Date:</th><td>10/25/04</td><th>SeqNo:</th><td>857111</td></td>	TestNo:	M4500-S D <th></th> <th></th> <th>Analysis Date:</th> <td>10/25/04</td> <th>SeqNo:</th> <td>857111</td>			Analysis Date:	10/25/04	SeqNo:	857111	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfide, Total - Colorimetric		15	1.2	17	0	88.2	80	120	0	0	0	
Sample ID:	04100498-001EMSD	SampType:	MSD	TestCode:	I_SUL_M_AT	Units:	mg/L	Prep Date:		Run ID:	DR2010_041025A	
Client ID:	HMW-25/041019 <th>Batch ID:</th> <td>R57284<th>TestNo:</th><td>M4500-S D<th></th><th></th><th>Analysis Date:</th><td>10/25/04</td><th>SeqNo:</th><td>857085</td></td></td>	Batch ID:	R57284 <th>TestNo:</th> <td>M4500-S D<th></th><th></th><th>Analysis Date:</th><td>10/25/04</td><th>SeqNo:</th><td>857085</td></td>	TestNo:	M4500-S D <th></th> <th></th> <th>Analysis Date:</th> <td>10/25/04</td> <th>SeqNo:</th> <td>857085</td>			Analysis Date:	10/25/04	SeqNo:	857085	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfide, Total - Colorimetric		0.61	0.05	0.67	0.02	88.1	80	120	0.59	3.33	15	

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

**CLIENT:** Clayton Group Services  
**Work Order:** 04100498  
**Project:** 15-03095.15-003

## ANALYTICAL QC SUMMARY REPORT

**TestCode:** I\_TDS\_M\_AT

Sample ID: MB-R57271	SampType: MBLK	TestCode: I_TDS_M_AT	Units: mg/L	Prep Date:			Run ID: INORGANICS_041022G				
Client ID: ZZZZZ	Batch ID: R57271	TestNo: M2540 C		Analysis Date: 10/22/04			SeqNo: 856898				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Dissolved Solids	< 20	20									
Sample ID: MB-R57271	SampType: MBLK	TestCode: I_TDS_M_AT	Units: mg/L	Prep Date:			Run ID: INORGANICS_041022G				
Client ID: ZZZZZ	Batch ID: R57271	TestNo: M2540 C		Analysis Date: 10/22/04			SeqNo: 856949				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Dissolved Solids	< 20	20									
Sample ID: LCS-R57271	SampType: LCS	TestCode: I_TDS_M_AT	Units: mg/L	Prep Date:			Run ID: INORGANICS_041022G				
Client ID: ZZZZZ	Batch ID: R57271	TestNo: M2540 C		Analysis Date: 10/22/04			SeqNo: 856899				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Dissolved Solids	960	20	1000	0	96	85	115	0	0		
Sample ID: LCSD	SampType: LCSD	TestCode: I_TDS_M_AT	Units: mg/L	Prep Date:			Run ID: INORGANICS_041022G				
Client ID: ZZZZZ	Batch ID: R57271	TestNo: M2540 C		Analysis Date: 10/22/04			SeqNo: 856960				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Dissolved Solids	952	20	1000	0	95.2	85	115	960	0.837	10	
Sample ID: 04100498-007BMS	SampType: MS	TestCode: I_TDS_M_AT	Units: mg/L	Prep Date:			Run ID: INORGANICS_041022G				
Client ID: EQB-001/041020	Batch ID: R57271	TestNo: M2540 C		Analysis Date: 10/22/04			SeqNo: 856938				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Dissolved Solids	484	20	500	0	96.8	85	115	0	0		
Sample ID: 04100498-007BMSD	SampType: MSD	TestCode: I_TDS_M_AT	Units: mg/L	Prep Date:			Run ID: INORGANICS_041022G				
Client ID: EQB-001/041020	Batch ID: R57271	TestNo: M2540 C		Analysis Date: 10/22/04			SeqNo: 856939				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits  
B - Analyte detected in the associated Method Blank

CLIENT: Clayton Group Services  
Work Order: 04100498  
Project: 15-03095.15-003

## ANALYTICAL QC SUMMARY REPORT

TestCode: I\_TDS\_M\_AT

Sample ID: 04100498-007BMSD	SampType: MSD	TestCode: I_TDS_M_AT	Units: mg/L	Prep Date:	Run ID: INORGANICS_041022G
Client ID: EQB-001/041020	Batch ID: R57271	TestNo: M2540 C		Analysis Date: 10/22/04	SeqNo: 856939
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC
Total Dissolved Solids	494	20	500	0	98.8
					85
					115
					484
					2.04
					15
					Qual

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

CLIENT: Clayton Group Services  
Work Order: 04100498  
Project: 15-03095.15-003

## ANALYTICAL QC SUMMARY REPORT

TestCode: L\_PH\_S\_A

Sample ID: LCS-R57176	SampType: LCS	TestCode: L_PH_S_A	Units:	Prep Date:	Run ID: PH METER - LOG IN_04						
Client ID: ZZZZZ	Batch ID: R57176	TestNo: SW9040 B		Analysis Date: 10/21/04	SeqNo: 855736						
<hr/>											
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
pH	7.01	1.00	7	0	100	99.1	100.9	0	0	10	H
<hr/>						<hr/>					
Sample ID: 04100498-001B DUP	SampType: DUP	TestCode: L_PH_S_A	Units:	Prep Date:	Run ID: PH METER - LOG IN_04						
Client ID: HMW-25/041019	Batch ID: R57176	TestNo: SW9040 B		Analysis Date: 10/21/04	SeqNo: 855725						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
pH	6.9	1.00	0	0	0	0	0	6.9	0	10	H

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

CLIENT: Clayton Group Services  
Work Order: 04100498  
Project: 15-03095.15-003

## ANALYTICAL QC SUMMARY REPORT

TestCode: M\_AQ\_GF\_ST

Sample ID: MB-22454		SampType: MBLK	TestCode: M_AQ_GF_ST		Units: mg/L	Prep Date: 10/22/04			Run ID: GFAA_041026B			
Client ID: ZZZZZ		Batch ID: 22454	TestNo: SW7000 G			Analysis Date: 10/26/04			SeqNo: 858491			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	7060A	< 0.0030	0.0030	0.003	0	0	-100	100	0	0	0	
Sample ID: MB-22454		SampType: MBLK	TestCode: M_AQ_GF_ST		Units: mg/L	Prep Date: 10/22/04			Run ID: GFAA_041027A			
Client ID: ZZZZZ		Batch ID: 22454	TestNo: SW7000 G			Analysis Date: 10/27/04			SeqNo: 858919			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	7421	< 0.0020	0.0020	0.002	0	0	-100	100	0	0	0	
Sample ID: MB-22454		SampType: MBLK	TestCode: M_AQ_GF_ST		Units: mg/L	Prep Date: 10/22/04			Run ID: GFAA-2_041029A			
Client ID: ZZZZZ		Batch ID: 22454	TestNo: SW7000 G			Analysis Date: 10/29/04			SeqNo: 860774			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	7041	< 0.0050	0.0050	0.005	0	0	-100	100	0	0	0	
Sample ID: MB-22454		SampType: MBLK	TestCode: M_AQ_GF_ST		Units: mg/L	Prep Date: 10/22/04			Run ID: GFAA_041028C			
Client ID: ZZZZZ		Batch ID: 22454	TestNo: SW7000 G			Analysis Date: 10/28/04			SeqNo: 861170			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Selenium	7740	< 0.0060	0.0060	0.006	0	0	-100	100	0	0	0	
Sample ID: LCS-22454		SampType: LCS	TestCode: M_AQ_GF_ST		Units: mg/L	Prep Date: 10/22/04			Run ID: GFAA_041026B			
Client ID: ZZZZZ		Batch ID: 22454	TestNo: SW7000 G			Analysis Date: 10/26/04			SeqNo: 858490			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	7060A	0.0166	0.0030	0.015	0	111	85	115	0	0	0	
Sample ID: LCS-22454		SampType: LCS	TestCode: M_AQ_GF_ST		Units: mg/L	Prep Date: 10/22/04			Run ID: GFAA_041027A			
Client ID: ZZZZZ		Batch ID: 22454	TestNo: SW7000 G			Analysis Date: 10/27/04			SeqNo: 858918			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

CLIENT: Clayton Group Services  
 Work Order: 04100498  
 Project: 15-03095.15-003

## ANALYTICAL QC SUMMARY REPORT

TestCode: M\_AQ\_GF\_ST

Sample ID: LCS-22454	SampType: LCS	TestCode: M_AQ_GF_ST	Units: mg/L	Prep Date: 10/22/04			Run ID: GFAA_041027A				
Client ID: ZZZZZ	Batch ID: 22454	TestNo: SW7000 G		Analysis Date: 10/27/04			SeqNo: 858918				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	7421	0.0164	0.0020	0.015	0	109	85	115	0	0	
Sample ID: LCS-22454	SampType: LCS	TestCode: M_AQ_GF_ST	Units: mg/L	Prep Date: 10/22/04			Run ID: GFAA-2_041029A				
Client ID: ZZZZZ	Batch ID: 22454	TestNo: SW7000 G		Analysis Date: 10/29/04			SeqNo: 860773				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	7041	0.0319	0.0050	0.03	0	106	85	115	0	0	
Sample ID: LCS-22454	SampType: LCS	TestCode: M_AQ_GF_ST	Units: mg/L	Prep Date: 10/22/04			Run ID: GFAA_041028C				
Client ID: ZZZZZ	Batch ID: 22454	TestNo: SW7000 G		Analysis Date: 10/28/04			SeqNo: 861205				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Selenium	7740	0.026	0.0060	0.03	0	86.7	85	115	0	0	
Sample ID: 04100498-002CMS	SampType: MS	TestCode: M_AQ_GF_ST	Units: mg/L	Prep Date: 10/22/04			Run ID: GFAA_041027A				
Client ID: HMW-26/041020	Batch ID: 22454	TestNo: SW7000 G		Analysis Date: 10/27/04			SeqNo: 858927				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	7421	0.0167	0.0020	0.015	0	111	70	130	0	0	
Sample ID: 04100498-002CMS	SampType: MS	TestCode: M_AQ_GF_ST	Units: mg/L	Prep Date: 10/22/04			Run ID: GFAA_041027B				
Client ID: HMW-26/041020	Batch ID: 22454	TestNo: SW7000 G		Analysis Date: 10/27/04			SeqNo: 859394				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	7060A	0.0175	0.0030	0.015	0	117	70	130	0	0	
Sample ID: 04100498-002CMS	SampType: MS	TestCode: M_AQ_GF_ST	Units: mg/L	Prep Date: 10/22/04			Run ID: GFAA-2_041029A				
Client ID: HMW-26/041020	Batch ID: 22454	TestNo: SW7000 G		Analysis Date: 10/29/04			SeqNo: 860782				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Qualifiers: ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits  
 R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

CLIENT: Clayton Group Services  
Work Order: 04100498  
Project: 15-03095.15-003

## ANALYTICAL QC SUMMARY REPORT

TestCode: M\_AQ\_GF\_ST

Sample ID: 04100498-002CMS	SampType: MS	TestCode: M_AQ_GF_ST	Units: mg/L	Prep Date: 10/22/04	Run ID: GFAA-2_041029A
Client ID: HMW-26/041020	Batch ID: 22454	TestNo: SW7000 G		Analysis Date: 10/29/04	SeqNo: 860782
<hr/>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Antimony	7041	0.0313	0.0050	0.03	0 104 70 130 0 0 0
Sample ID: 04100498-002CMS	SampType: MS	TestCode: M_AQ_GF_ST	Units: mg/L	Prep Date: 10/22/04	Run ID: GFAA_041101A
Client ID: HMW-26/041020	Batch ID: 22454	TestNo: SW7000 G		Analysis Date: 11/1/04	SeqNo: 861565
<hr/>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Selenium	7740	0.0357	0.0240	0.03	0 119 70 130 0 0 0
Sample ID: 04100498-002CMSD	SampType: MSD	TestCode: M_AQ_GF_ST	Units: mg/L	Prep Date: 10/22/04	Run ID: GFAA_041027A
Client ID: HMW-26/041020	Batch ID: 22454	TestNo: SW7000 G		Analysis Date: 10/27/04	SeqNo: 858930
<hr/>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Lead	7421	0.0168	0.0020	0.015	0 112 70 130 0.0167 0.597 15
Sample ID: 04100498-002CMSD	SampType: MSD	TestCode: M_AQ_GF_ST	Units: mg/L	Prep Date: 10/22/04	Run ID: GFAA_041027B
Client ID: HMW-26/041020	Batch ID: 22454	TestNo: SW7000 G		Analysis Date: 10/27/04	SeqNo: 859035
<hr/>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Arsenic	7060A	0.0173	0.0030	0.015	0 115 70 130 0.0175 1.15 15
Sample ID: 04100498-002CMSD	SampType: MSD	TestCode: M_AQ_GF_ST	Units: mg/L	Prep Date: 10/22/04	Run ID: GFAA-2_041029A
Client ID: HMW-26/041020	Batch ID: 22454	TestNo: SW7000 G		Analysis Date: 10/29/04	SeqNo: 860795
<hr/>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Antimony	7041	0.0315	0.0050	0.03	0 105 70 130 0.0313 0.637 15
Sample ID: 04100498-002CMSD	SampType: MSD	TestCode: M_AQ_GF_ST	Units: mg/L	Prep Date: 10/22/04	Run ID: GFAA_041101A
Client ID: HMW-26/041020	Batch ID: 22454	TestNo: SW7000 G		Analysis Date: 11/1/04	SeqNo: 861554
<hr/>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Qualifiers: ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in the associated Method Blank

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

CLIENT: Clayton Group Services  
Work Order: 04100498  
Project: 15-03095.15-003

## ANALYTICAL QC SUMMARY REPORT

TestCode: M\_AQ\_GF\_ST

Sample ID: 04100498-002CMSD	SampType: MSD	TestCode: M_AQ_GF_ST	Units: mg/L	Prep Date: 10/22/04	Run ID: GFAA_041101A
Client ID: HMW-26/041020	Batch ID: 22454	TestNo: SW7000 G		Analysis Date: 11/1/04	SeqNo: 861554
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC
Selenium	7740	0.038	0.0240	0.03	127
				0	70
				130	130
				0.0357	0.0357
				6.24	6.24
				15	15
				Qual	Qual

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

**CLIENT:** Clayton Group Services  
**Work Order:** 04100498  
**Project:** 15-03095.15-003

## ANALYTICAL QC SUMMARY REPORT

TestCode: M\_AQ\_ICP\_ST

Sample ID: MB-22455	SampType: MBLK	TestCode: M_AQ_ICP_ST		Units: mg/L	Prep Date: 10/22/04			Run ID: ICP_041101A			
Client ID: ZZZZZ	Batch ID: 22455	TestNo: SW6010B			Analysis Date: 11/1/04			SeqNo: 861146			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	< 0.0050	0.0050	0.005	0	0	-100	100	0	0	0	
Beryllium	< 0.0010	0.0010	0.001	0	0	-100	100	0	0	0	
Cadmium	< 0.0020	0.0020	0.002	0	0	-100	100	0	0	0	
Chromium	< 0.0100	0.0100	0.01	0	0	-100	100	0	0	0	
Cobalt	< 0.0100	0.0100	0.01	0	0	-100	100	0	0	0	
Nickel	< 0.0100	0.0100	0.01	0	0	-100	100	0	0	0	
Silver	< 0.0100	0.0100	0.01	0	0	-100	100	0	0	0	
Vanadium	0.0063	0.0100	0.01	0	63	-100	100	0	0	0	J
Zinc	< 0.0100	0.0100	0.01	0	0	-100	100	0	0	0	

Sample ID: LCS-22455	SampType: LCS	TestCode: M_AQ_ICP_ST		Units: mg/L	Prep Date: 10/22/04			Run ID: ICP_041101A			
Client ID: ZZZZZ	Batch ID: 22455	TestNo: SW6010B			Analysis Date: 11/1/04			SeqNo: 861145			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	2.12	0.0050	2	0	106	85	115	0	0	0	
Beryllium	0.0518	0.0010	0.05	0	104	85	115	0	0	0	
Cadmium	0.0525	0.0020	0.05	0	105	85	115	0	0	0	
Chromium	0.196	0.0100	0.2	0	98	85	115	0	0	0	
Cobalt	0.512	0.0100	0.5	0	102	85	115	0	0	0	
Nickel	0.531	0.0100	0.5	0	106	85	115	0	0	0	
Silver	0.0473	0.0100	0.05	0	94.6	85	115	0	0	0	
Vanadium	0.519	0.0100	0.5	0.0063	103	85	115	0	0	0	
Zinc	0.531	0.0100	0.5	0	106	85	115	0	0	0	

Sample ID: 04100498-007CMS	SampType: MS	TestCode: M_AQ_ICP_ST		Units: mg/L	Prep Date: 10/22/04			Run ID: ICP_041101A			
Client ID: EQB-001/041020	Batch ID: 22455	TestNo: SW6010B			Analysis Date: 11/1/04			SeqNo: 861273			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	2.04	0.0050	2	0	102	75	125	0	0	0	
Beryllium	0.0448	0.0010	0.05	0	89.6	75	125	0	0	0	
Cadmium	0.0545	0.0020	0.05	0	109	75	125	0	0	0	

**Qualifiers:** ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits  
 R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

**CLIENT:** Clayton Group Services  
**Work Order:** 04100498  
**Project:** 15-03095.15-003

## ANALYTICAL QC SUMMARY REPORT

TestCode: M\_AQ\_ICP\_ST

Sample ID: 04100498-007CMS	SampType: MS	TestCode: M_AQ_ICP_ST	Units: mg/L	Prep Date: 10/22/04	Run ID: ICP_041101A						
Client ID: EQB-001/041020	Batch ID: 22455	TestNo: SW6010B		Analysis Date: 11/1/04	SeqNo: 861273						
<hr/>											
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	0.226	0.0100	0.2	0	113	75	125	0	0		
Cobalt	0.517	0.0100	0.5	0	103	75	125	0	0		
Nickel	0.527	0.0100	0.5	0	105	75	125	0	0		
Silver	0.0559	0.0100	0.05	0	112	75	125	0	0		
Vanadium	0.456	0.0100	0.5	0	91.2	75	125	0	0		
Zinc	0.493	0.0100	0.5	0	98.6	75	125	0	0		
<hr/>											
Sample ID: 04100498-007CMSD	SampType: MSD	TestCode: M_AQ_ICP_ST	Units: mg/L	Prep Date: 10/22/04	Run ID: ICP_041101A						
Client ID: EQB-001/041020	Batch ID: 22455	TestNo: SW6010B		Analysis Date: 11/1/04	SeqNo: 861274						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	2.04	0.0050	2	0	102	75	125	2.04	0	15	
Beryllium	0.0451	0.0010	0.05	0	90.2	75	125	0.0448	0.667	15	
Cadmium	0.054	0.0020	0.05	0	108	75	125	0.0545	0.922	15	
Chromium	0.23	0.0100	0.2	0	115	75	125	0.226	1.75	15	
Cobalt	0.518	0.0100	0.5	0	104	75	125	0.517	0.193	15	
Nickel	0.526	0.0100	0.5	0	105	75	125	0.527	0.190	15	
Silver	0.0524	0.0100	0.05	0	105	75	125	0.0559	6.46	15	
Vanadium	0.452	0.0100	0.5	0	90.4	75	125	0.456	0.881	15	
Zinc	0.489	0.0100	0.5	0	97.8	75	125	0.493	0.814	15	

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<b>Qualifiers:</b>	ND - Not Detected at the Reporting Limit	S - Spike Recovery outside accepted recovery limits
	J - Analyte detected below quantitation limits	R - RPD outside accepted recovery limits
		B - Analyte detected in the associated Method Blank

CLIENT: Clayton Group Services  
Work Order: 04100498  
Project: 15-03095.15-003

## ANALYTICAL QC SUMMARY REPORT

TestCode: M\_HG\_AQ\_S

Sample ID: MB-22511	SampType: MBLK	TestCode: M_HG_AQ_S	Units: mg/L	Prep Date:	10/27/04	Run ID:	CVAA_041027A				
Client ID: ZZZZZ	Batch ID: 22511	TestNo: SW7470 A		Analysis Date:	10/27/04	SeqNo:	858848				
<b>Analyte</b> <b>Result</b> <b>PQL</b> <b>SPK value</b> <b>SPK Ref Val</b> <b>%REC</b> <b>LowLimit</b> <b>HighLimit</b> <b>RPD Ref Val</b> <b>%RPD</b> <b>RPDLimit</b> <b>Qual</b>											
Mercury	0.00016	0.00020	0.0002	0	80	-100	100	0	0	0	J
Sample ID: LCS-22511	SampType: LCS	TestCode: M_HG_AQ_S	Units: mg/L	Prep Date:	10/27/04	Run ID:	CVAA_041027A				
Client ID: ZZZZZ	Batch ID: 22511	TestNo: SW7470 A		Analysis Date:	10/27/04	SeqNo:	858847				
<b>Analyte</b> <b>Result</b> <b>PQL</b> <b>SPK value</b> <b>SPK Ref Val</b> <b>%REC</b> <b>LowLimit</b> <b>HighLimit</b> <b>RPD Ref Val</b> <b>%RPD</b> <b>RPDLimit</b> <b>Qual</b>											
Mercury	0.0048	0.00020	0.005	0	96	85	115	0	0	0	
Sample ID: 04100498-001CMS	SampType: MS	TestCode: M_HG_AQ_S	Units: mg/L	Prep Date:	10/27/04	Run ID:	CVAA_041027A				
Client ID: HMW-25/041019	Batch ID: 22511	TestNo: SW7470 A		Analysis Date:	10/27/04	SeqNo:	859417				
<b>Analyte</b> <b>Result</b> <b>PQL</b> <b>SPK value</b> <b>SPK Ref Val</b> <b>%REC</b> <b>LowLimit</b> <b>HighLimit</b> <b>RPD Ref Val</b> <b>%RPD</b> <b>RPDLimit</b> <b>Qual</b>											
Mercury	0.00488	0.00020	0.005	0	97.6	75	125	0	0	0	
Sample ID: 04100498-001CMSD	SampType: MSD	TestCode: M_HG_AQ_S	Units: mg/L	Prep Date:	10/27/04	Run ID:	CVAA_041027A				
Client ID: HMW-25/041019	Batch ID: 22511	TestNo: SW7470 A		Analysis Date:	10/27/04	SeqNo:	859418				
<b>Analyte</b> <b>Result</b> <b>PQL</b> <b>SPK value</b> <b>SPK Ref Val</b> <b>%REC</b> <b>LowLimit</b> <b>HighLimit</b> <b>RPD Ref Val</b> <b>%RPD</b> <b>RPDLimit</b> <b>Qual</b>											
Mercury	0.00481	0.00020	0.005	0	96.2	75	125	0.00488	1.44	15	

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

CLIENT: Clayton Group Services  
 Work Order: 04100498  
 Project: 15-03095.15-003

## ANALYTICAL QC SUMMARY REPORT

TestCode: SV\_8270S\_W

Sample ID: MB-22462	SampType: MBLK	TestCode: SV_8270S_W	Units: mg/L	Prep Date: 10/25/04	Run ID: 5971 INST. B_041026A
Client ID: ZZZZZ	Batch ID: 22462	TestNo: SW8270C		Analysis Date: 10/26/04	SeqNo: 857976
<hr/>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC
2,4-Dimethylphenol	ND	0.010			
2,4-Dinitrophenol	ND	0.020			
4-Nitrophenol	ND	0.020			
Bis(2-ethylhexyl)phthalate	ND	0.006			
Di-n-butyl phthalate	ND	0.010			
Diethyl phthalate	ND	0.010			
Dimethyl phthalate	ND	0.010			
m,p-Cresol	ND	0.010			
o-Cresol	ND	0.010			
Phenol	ND	0.005			
Pyrene	ND	0.010			
Quinoline	ND	0.005			
Surr: 2,4,6-Tribromophenol	0.1	0	0.1	0	100
Surr: 2-Fluorobiphenyl	0.048	0	0.05	0	96
Surr: 2-Fluorophenol	0.058	0	0.1	0	58
Surr: Nitrobenzene-d5	0.039	0	0.05	0	78
Surr: p-Terphenyl-d14	0.053	0	0.05	0	106
Surr: Phenol-d5	0.039	0	0.1	0	39
					22.2
					48.9
					0
					0

Sample ID: LCS-22462	SampType: LCS	TestCode: SV_8270S_W	Units: mg/L	Prep Date: 10/25/04	Run ID: 5971 INST. B_041026A
Client ID: ZZZZZ	Batch ID: 22462	TestNo: SW8270C		Analysis Date: 10/26/04	SeqNo: 858189
<hr/>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC
4-Nitrophenol	0.032	0.020	0.1	0	32
Phenol	0.033	0.005	0.1	0	33
Pyrene	0.046	0.010	0.05	0	92
Surr: 2,4,6-Tribromophenol	0.099	0	0.1	0	99
Surr: 2-Fluorobiphenyl	0.044	0	0.05	0	88
Surr: 2-Fluorophenol	0.053	0	0.1	0	53
Surr: Nitrobenzene-d5	0.038	0	0.05	0	76
Surr: p-Terphenyl-d14	0.05	0	0.05	0	100
					62.2
					117
					0
					0

Qualifiers: ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits  
 R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

CLIENT: Clayton Group Services  
Work Order: 04100498  
Project: 15-03095.15-003

## ANALYTICAL QC SUMMARY REPORT

TestCode: SV\_8270S\_W

Sample ID: LCS-22462	SampType: LCS	TestCode: SV_8270S_W	Units: mg/L	Prep Date: 10/25/04	Run ID: 5971 INST. B_041026A
Client ID: ZZZZZ	Batch ID: 22462	TestNo: SW8270C		Analysis Date: 10/26/04	SeqNo: 858189
<hr/>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC
Surf: Phenol-d5	0.036	0	0.1	0	36
					20.3
					46.7
					0
					0

Sample ID: LCSDUP-22462	SampType: LCSD	TestCode: SV_8270S_W	Units: mg/L	Prep Date: 10/25/04	Run ID: 5971 INST. B_041026A
Client ID: ZZZZZ	Batch ID: 22462	TestNo: SW8270C		Analysis Date: 10/26/04	SeqNo: 858285
<hr/>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC
4-Nitrophenol	0.034	0.020	0.1	0	34
Phenol	0.035	0.005	0.1	0	35
Pyrene	0.049	0.010	0.05	0	98
Surf: 2,4,6-Tribromophenol	0.102	0	0.1	0	102
Surf: 2-Fluorobiphenyl	0.044	0	0.05	0	88
Surf: 2-Fluorophenol	0.056	0	0.1	0	56
Surf: Nitrobenzene-d5	0.038	0	0.05	0	76
Surf: p-Terphenyl-d14	0.052	0	0.05	0	104
Surf: Phenol-d5	0.039	0	0.1	0	39
					20.3
					46.7
					0
					0

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

CLIENT: Clayton Group Services  
Work Order: 04100498  
Project: 15-03095.15-003

## ANALYTICAL QC SUMMARY REPORT

TestCode: SV\_8310S\_W

Sample ID: MB-22456	SampType: MBLK	TestCode: SV_8310S_W	Units: mg/L	Prep Date: 10/22/04	Run ID: HPLC INST. C_041022A						
Client ID: ZZZZZ	Batch ID: 22456	TestNo: SW8310		Analysis Date: 10/22/04	SeqNo: 856452						
<hr/>											
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Acenaphthene	ND	0.00300									
Acenaphthylene	ND	0.00150									
Anthracene	ND	0.00030									
Benzo(a)anthracene	ND	0.00009									
Benzo(a)pyrene	ND	0.00012									
Benzo(b)fluoranthene	ND	0.00015									
Benzo(k)fluoranthene	ND	0.00015									
Chrysene	ND	0.00045									
Dibenzo(a,h)anthracene	ND	0.00018									
Fluoranthene	ND	0.00090									
Fluorene	ND	0.00030									
Indeno(1,2,3-cd)pyrene	ND	0.00030									
Naphthalene	ND	0.00300									
Phenanthrene	ND	0.00060									
Pyrene	ND	0.00030									
Surrogate: Terphenyl-d14	0.0103	0	0.01	0	103	71.4	126	0	0		

Sample ID: LCS-22456	SampType: LCS	TestCode: SV_8310S_W	Units: mg/L	Prep Date: 10/22/04	Run ID: HPLC INST. C_041022A						
Client ID: ZZZZZ	Batch ID: 22456	TestNo: SW8310		Analysis Date: 10/22/04	SeqNo: 856450						
<hr/>											
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
<hr/>											
Acenaphthene	0.0346	0.00300	0.05	0	69.2	54.6	90.2	0	0		
Acenaphthylene	0.0723	0.00150	0.1	0	72.3	58.4	89.6	0	0		
Anthracene	0.00417	0.00030	0.005	0	83.4	71.8	102	0	0		
Benzo(a)anthracene	0.00382	0.00009	0.005	0	76.4	67.1	98.6	0	0		
Benzo(a)pyrene	0.00366	0.00012	0.005	0	73.2	68.5	102	0	0		
Benzo(b)fluoranthene	0.008	0.00015	0.01	0	80	68.5	101	0	0		
Benzo(k)fluoranthene	0.00434	0.00015	0.005	0	86.8	68.2	102	0	0		
Chrysene	0.00387	0.00045	0.005	0	77.4	65.9	99.7	0	0		
Dibenzo(a,h)anthracene	0.00789	0.00018	0.01	0	78.9	70.6	116	0	0		
Fluoranthene	0.00804	0.00090	0.01	0	80.4	68.6	101	0	0		

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

CLIENT: Clayton Group Services  
 Work Order: 04100498  
 Project: 15-03095.15-003

## ANALYTICAL QC SUMMARY REPORT

TestCode: SV\_8310S\_W

Sample ID: LCS-22456	SampType: LCS	TestCode: SV_8310S_W		Units: mg/L		Prep Date: 10/22/04		Run ID: HPLC INST. C_041022A			
Client ID: ZZZZZ	Batch ID: 22456	TestNo: SW8310				Analysis Date: 10/22/04		SeqNo: 856450			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluorene	0.00729	0.00030	0.01	0	72.9	53	101	0	0	0	
Indeno(1,2,3-cd)pyrene	0.00402	0.00030	0.005	0	80.4	71.2	103	0	0	0	
Naphthalene	0.0326	0.00300	0.05	0	65.2	49.2	86.5	0	0	0	
Phenanthrene	0.00371	0.00060	0.005	0	74.2	63.3	93.6	0	0	0	
Pyrene	0.00356	0.00030	0.005	0	71.2	61.3	88.8	0	0	0	
Surr: Terphenyl-d14	0.00871	0	0.01	0	87.1	76.6	109	0	0	0	

Sample ID: LCSDUP-22456	SampType: LCSD	TestCode: SV_8310S_W		Units: mg/L		Prep Date: 10/22/04		Run ID: HPLC INST. C_041022A			
Client ID: ZZZZZ	Batch ID: 22456	TestNo: SW8310				Analysis Date: 10/22/04		SeqNo: 856451			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	0.0398	0.00300	0.05	0	79.6	54.6	90.2	0.0346	14.0	21.9	
Acenaphthylene	0.0832	0.00150	0.1	0	83.2	58.4	89.6	0.0723	14.0	22.7	
Anthracene	0.00466	0.00030	0.005	0	93.2	71.8	102	0.00417	11.1	20	
Benzo(a)anthracene	0.00413	0.00009	0.005	0	82.6	67.1	98.6	0.00382	7.80	18.8	
Benzo(a)pyrene	0.004	0.00012	0.005	0	80	68.5	102	0.00366	8.87	19.8	
Benzo(b)fluoranthene	0.00874	0.00015	0.01	0	87.4	68.5	101	0.008	8.84	19	
Benzo(k)fluoranthene	0.00472	0.00015	0.005	0	94.4	68.2	102	0.00434	8.38	19.2	
Chrysene	0.00416	0.00045	0.005	0	83.2	65.9	99.7	0.00387	7.22	18.2	
Dibenz(a,h)anthracene	0.00877	0.00018	0.01	0	87.7	70.6	116	0.00789	10.6	17.6	
Fluoranthene	0.00888	0.00090	0.01	0	88.8	68.6	101	0.00804	9.93	18.1	
Fluorene	0.00849	0.00030	0.01	0	84.9	53	101	0.00729	15.2	26.9	
Indeno(1,2,3-cd)pyrene	0.00439	0.00030	0.005	0	87.8	71.2	103	0.00402	8.80	19	
Naphthalene	0.0374	0.00300	0.05	0	74.8	49.2	86.5	0.0326	13.7	30	
Phenanthrene	0.00423	0.00060	0.005	0	84.6	63.3	93.6	0.00371	13.1	20	
Pyrene	0.00393	0.00030	0.005	0	78.6	61.3	88.8	0.00356	9.88	18.9	
Surr: Terphenyl-d14	0.00945	0	0.01	0	94.5	76.6	109	0	0	20	

Qualifiers: ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits  
 R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

CLIENT: Clayton Group Services  
Work Order: 04100498  
Project: 15-03095.15-003

## ANALYTICAL QC SUMMARY REPORT

TestCode: SV\_DIOXANE\_W

Sample ID:	SampType:	TestCode:	Units:	Prep Date:	Run ID:						
Client ID:	Batch ID:	TestNo:		Analysis Date:	SeqNo:						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sample ID: MB-102504	SampType: MBLK	TestCode: SV_DIOXANE_W	Units: mg/L	Prep Date:	Run ID: GC INST. I_041025A						
Client ID: ZZZZZ	Batch ID: R57281	TestNo: SW8015		Analysis Date: 10/25/04	SeqNo: 857045						
1,4-Dioxane	ND	0.50									
Sample ID: MB-102604	SampType: MBLK	TestCode: SV_DIOXANE_W	Units: mg/L	Prep Date:	Run ID: GC INST. I_041026A						
Client ID: ZZZZZ	Batch ID: R57341	TestNo: SW8015		Analysis Date: 10/26/04	SeqNo: 858424						
1,4-Dioxane	ND	0.50									
Sample ID: LCS-102504	SampType: LCS	TestCode: SV_DIOXANE_W	Units: mg/L	Prep Date:	Run ID: GC INST. I_041025A						
Client ID: ZZZZZ	Batch ID: R57281	TestNo: SW8015		Analysis Date: 10/25/04	SeqNo: 857046						
1,4-Dioxane	50	0.50	50	0	100	80	120	0	0		
Sample ID: LCS-102604	SampType: LCS	TestCode: SV_DIOXANE_W	Units: mg/L	Prep Date:	Run ID: GC INST. I_041026A						
Client ID: ZZZZZ	Batch ID: R57341	TestNo: SW8015		Analysis Date: 10/26/04	SeqNo: 858425						
1,4-Dioxane	49	0.50	50	0	98	80	120	0	0		
Sample ID: 04100498-005GMS	SampType: MS	TestCode: SV_DIOXANE_W	Units: mg/L	Prep Date:	Run ID: GC INST. I_041026A						
Client ID: HMW-29/041020	Batch ID: R57341	TestNo: SW8015		Analysis Date: 10/26/04	SeqNo: 858427						
1,4-Dioxane	51	0.50	50	0	102	80	120	0	0		
Sample ID: 04100498-005GMSD	SampType: MSD	TestCode: SV_DIOXANE_W	Units: mg/L	Prep Date:	Run ID: GC INST. I_041026A						
Client ID: HMW-29/041020	Batch ID: R57341	TestNo: SW8015		Analysis Date: 10/26/04	SeqNo: 858428						
1,4-Dioxane	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

**CLIENT:** Clayton Group Services  
**Work Order:** 04100498  
**Project:** 15-03095.15-003

## ANALYTICAL QC SUMMARY REPORT

TestCode: SV\_DIOXANE\_W

Sample ID: 04100498-005GMSD	SampType: MSD	TestCode: SV_DIOXANE_W	Units: mg/L	Prep Date:	Run ID: GC INST. I_041026A						
Client ID: HMW-29/041020	Batch ID: R57341	TestNo: SW8015		Analysis Date: 10/26/04	SeqNo: 858428						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,4-Dioxane	55	0.50	50	0	110	80	120	51	7.55	15	

**Qualifiers:**  
ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

**CLIENT:** Clayton Group Services  
**Work Order:** 04100498  
**Project:** 15-03095.15-003

## ANALYTICAL QC SUMMARY REPORT

**TestCode:** V\_8260S\_W

Sample ID: MBLK-A041021-1	SampType: MBLK	TestCode: V_8260S_W	Units: µg/L	Prep Date: 10/21/04	Run ID: 5971 INST. A_041021C
Client ID: ZZZZZ	Batch ID: 22457	TestNo: SW8260B		Analysis Date: 10/21/04	SeqNo: 856052
<hr/>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC
1,1,1-Trichloroethane	ND	5.0			
1,1-Dichloroethane	ND	5.0			
1,2-Dibromoethane	ND	5.0			
1,2-Dichlorobenzene	ND	5.0			
1,2-Dichloroethane	ND	5.0			
1,3-Dichlorobenzene	ND	5.0			
1,4-Dichlorobenzene	ND	5.0			
2-Butanone	ND	25.0			
Benzene	ND	2.0			
Carbon disulfide	ND	5.0			
Chlorobenzene	ND	5.0			
Chloroform	ND	5.0			
Ethylbenzene	ND	5.0			
Methyl tert-butyl ether	ND	2.0			
Styrene	ND	5.0			
Tetrachloroethylene	ND	5.0			
Toluene	ND	5.0			
Trichloroethylene	ND	5.0			
Xylenes, Total	ND	5.0			
Surr: 1,2-Dichloroethane-d4	53.7	0	50	0	107
Surr: 4-Bromofluorobenzene	50.4	0	50	0	101
Surr: Dibromofluoromethane	52	0	50	0	104
Surr: Toluene-d8	52.7	0	50	0	105
					84.3      135      0      0
					81.1      113.3      0      0
					88.9      121.2      0      0
					84.1      114.5      0      0

Sample ID: MBLK-A041025-1	SampType: MBLK	TestCode: V_8260S_W	Units: µg/L	Prep Date: 10/25/04	Run ID: 5971 INST. A_041025B
Client ID: ZZZZZ	Batch ID: 22495	TestNo: SW8260B		Analysis Date: 10/25/04	SeqNo: 857819
<hr/>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC
1,1,1-Trichloroethane	ND	5.0			
1,1-Dichloroethane	ND	5.0			
1,2-Dibromoethane	ND	5.0			

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

CLIENT: Clayton Group Services  
Work Order: 04100498  
Project: 15-03095.15-003

## ANALYTICAL QC SUMMARY REPORT

TestCode: V\_8260S\_W

Sample ID: MBLK-A041025-1	SampType: MBLK	TestCode: V_8260S_W		Units: µg/L		Prep Date: 10/25/04		Run ID: 5971 INST. A_041025B			
Client ID: ZZZZZ	Batch ID: 22495	TestNo: SW8260B				Analysis Date: 10/25/04		SeqNo: 857819			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2-Dichlorobenzene	ND	5.0									
1,2-Dichloroethane	ND	5.0									
1,3-Dichlorobenzene	ND	5.0									
1,4-Dichlorobenzene	ND	5.0									
2-Butanone	ND	25.0									
Benzene	ND	2.0									
Carbon disulfide	ND	5.0									
Chlorobenzene	ND	5.0									
Chloroform	ND	5.0									
Ethylbenzene	ND	5.0									
Methyl tert-butyl ether	ND	2.0									
Styrene	ND	5.0									
Tetrachloroethene	ND	5.0									
Toluene	ND	5.0									
Trichloroethene	ND	5.0									
Xylenes, Total	ND	5.0									
Surr: 1,2-Dichloroethane-d4	46.1	0	50	0	92.2	84.3	135	0	0		
Surr: 4-Bromofluorobenzene	49.4	0	50	0	98.8	81.1	113.3	0	0		
Surr: Dibromofluoromethane	48.2	0	50	0	96.4	88.9	121.2	0	0		
Surr: Toluene-d8	50.1	0	50	0	100	84.1	114.5	0	0		

Sample ID: LCS-A041021-1	SampType: LCS	TestCode: V_8260S_W		Units: µg/L		Prep Date: 10/21/04		Run ID: 5971 INST. A_041021C			
Client ID: ZZZZZ	Batch ID: 22457	TestNo: SW8260B				Analysis Date: 10/21/04		SeqNo: 856051			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	58.2	5.0	50	0	116	72.6	132	0	0		
1,2-Dibromoethane	53	5.0	50	0	106	70	130	0	0		
1,2-Dichlorobenzene	52.1	5.0	50	0	104	86.6	124	0	0		
1,2-Dichloroethane	58	5.0	50	0	116	83.5	128	0	0		
1,3-Dichlorobenzene	50.6	5.0	50	0	101	85.3	123	0	0		
1,4-Dichlorobenzene	51.7	5.0	50	0	103	87.7	122	0	0		

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

CLIENT: Clayton Group Services  
 Work Order: 04100498  
 Project: 15-03095.15-003

## ANALYTICAL QC SUMMARY REPORT

TestCode: V\_8260S\_W

Sample ID: LCS-A041021-1	SampType: LCS	TestCode: V_8260S_W		Units: µg/L		Prep Date: 10/21/04			Run ID: 5971 INST. A_041021C		
Client ID: ZZZZZ	Batch ID: 22457	TestNo: SW8260B		Analysis Date: 10/21/04			SeqNo: 856051				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2-Butanone	45.5	25.0	50	0	91	72.8	129	0	0	0	
Benzene	55	2.0	50	0	110	77.4	120	0	0	0	
Chlorobenzene	51.3	5.0	50	0	103	87.2	117	0	0	0	
Chloroform	54.7	5.0	50	0	109	82.1	123	0	0	0	
Ethylbenzene	54.3	5.0	50	0	109	78.5	122	0	0	0	
Methyl tert-butyl ether	56.4	2.0	50	0	113	70	130	0	0	0	
Tetrachloroethene	44.5	5.0	50	0	89	66.7	117	0	0	0	
Toluene	52.8	5.0	50	0	106	81.6	118	0	0	0	
Trichloroethene	52.7	5.0	50	0	105	79.6	118	0	0	0	
Xylenes, Total	108	5.0	100	0	108	80.7	122	0	0	0	
Surr: 1,2-Dichloroethane-d4	54.3	0	50	0	109	84.3	136	0	0	0	
Surr: 4-Bromofluorobenzene	50.3	0	50	0	101	81.1	113.3	0	0	0	
Surr: Dibromofluoromethane	52.7	0	50	0	105	88.9	121.2	0	0	0	
Surr: Toluene-d8	52.5	0	50	0	105	84.1	114.5	0	0	0	

Sample ID: LCS-A041025-1	SampType: LCS	TestCode: V_8260S_W		Units: µg/L		Prep Date: 10/25/04			Run ID: 5971 INST. A_041025B		
Client ID: ZZZZZ	Batch ID: 22495	TestNo: SW8260B		Analysis Date: 10/25/04			SeqNo: 857818				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	49	5.0	50	0	98	72.6	132	0	0	0	
1,2-Dibromoethane	51.1	5.0	50	0	102	70	130	0	0	0	
1,2-Dichlorobenzene	50.9	5.0	50	0	102	86.6	124	0	0	0	
1,2-Dichloroethane	47.3	5.0	50	0	94.6	83.5	128	0	0	0	
1,3-Dichlorobenzene	48.8	5.0	50	0	97.6	85.3	123	0	0	0	
1,4-Dichlorobenzene	49.2	5.0	50	0	98.4	87.7	122	0	0	0	
2-Butanone	46.8	25.0	50	0	93.6	72.8	129	0	0	0	
Benzene	49.9	2.0	50	0	99.8	77.4	120	0	0	0	
Chlorobenzene	48.7	5.0	50	0	97.4	87.2	117	0	0	0	
Chloroform	46.3	5.0	50	0	92.6	82.1	123	0	0	0	
Ethylbenzene	51	5.0	50	0	102	78.5	122	0	0	0	
Methyl tert-butyl ether	48	2.0	50	0	96	70	130	0	0	0	

Qualifiers: ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits  
 R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

CLIENT: Clayton Group Services  
 Work Order: 04100498  
 Project: 15-03095.15-003

## ANALYTICAL QC SUMMARY REPORT

TestCode: V\_8260S\_W

Sample ID: LCS-A041025-1	SampType: LCS	TestCode: V_8260S_W	Units: µg/L	Prep Date: 10/25/04	Run ID: 5971 INST. A_041025B						
Client ID: ZZZZZ	Batch ID: 22495	TestNo: SW8260B		Analysis Date: 10/25/04	SeqNo: 857818						
<b>Analyte</b>											
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Tetrachloroethene	39.6	5.0	50	0	79.2	66.7	117	0	0	0
Toluene	48.6	5.0	50	0	97.2	81.6	118	0	0	0
Trichloroethene	49	5.0	50	0	98	79.6	118	0	0	0
Xylenes, Total	99.4	5.0	100	0	99.4	80.7	122	0	0	0
Surr: 1,2-Dichloroethane-d4	45.6	0	50	0	91.2	84.3	136	0	0	0
Surr: 4-Bromofluorobenzene	49.5	0	50	0	99	81.1	113.3	0	0	0
Surr: Dibromofluoromethane	48.9	0	50	0	97.8	88.9	121.2	0	0	0
Surr: Toluene-d8	49	0	50	0	98	84.1	114.5	0	0	0

Sample ID: 04100498-003HMS	SampType: MS	TestCode: V_8260S_W	Units: µg/L	Prep Date: 10/21/04	Run ID: 5971 INST. A_041021C						
Client ID: HMW-27/041020	Batch ID: 22457	TestNo: SW8260B		Analysis Date: 10/21/04	SeqNo: 856061						
<b>Analyte</b>											
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	54.6	2.0	56	0	97.5	70.8	122	0	0	0	
Chlorobenzene	50.1	5.0	56	0	89.5	85.6	111	0	0	0	
Ethylbenzene	51.2	5.0	56	0	91.4	81	113	0	0	0	
Toluene	53.3	5.0	56	0	95.2	77.2	117	0	0	0	
Trichloroethene	50.2	5.0	56	0	89.6	73.9	118	0	0	0	
Xylenes, Total	106	5.0	112	0	94.6	80.3	116	0	0	0	
Surr: 1,2-Dichloroethane-d4	60.9	0	50	0	122	84.3	135	0	0	0	
Surr: 4-Bromofluorobenzene	51.3	0	50	0	103	81.1	113.3	0	0	0	
Surr: Dibromofluoromethane	55.2	0	50	0	110	88.9	121.2	0	0	0	
Surr: Toluene-d8	52.6	0	50	0	105	84.1	114.5	0	0	0	

Sample ID: 04100498-003HMSD	SampType: MSD	TestCode: V_8260S_W	Units: µg/L	Prep Date: 10/21/04	Run ID: 5971 INST. A_041021C						
Client ID: HMW-27/041020	Batch ID: 22457	TestNo: SW8260B		Analysis Date: 10/21/04	SeqNo: 856062						
<b>Analyte</b>											
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	55.5	2.0	56	0	99.1	70.8	122	54.6	1.64	15	
Chlorobenzene	51.6	5.0	56	0	92.1	85.6	111	50.1	2.95	15	
Ethylbenzene	53.5	5.0	56	0	95.5	81	113	51.2	4.39	15	

**Qualifiers:** ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits  
 S - Spike Recovery outside accepted recovery limits  
 R - RPD outside accepted recovery limits

CLIENT: Clayton Group Services  
Work Order: 04100498  
Project: 15-03095.15-003

## ANALYTICAL QC SUMMARY REPORT

TestCode: V\_8260S\_W

Sample ID:	04100498-003HMSD	SampType:	MSD	TestCode:	V_8260S_W	Units:	µg/L	Prep Date:	10/21/04	Run ID:	5971 INST. A_041021C
Client ID:	HMW-27/041020	Batch ID:	22457	TestNo:	SW8260B			Analysis Date:	10/21/04	SeqNo:	856062
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Toluene	54.8	5.0	56	0	97.9	77.2	117	53.3	2.77	15	
Trichloroethene	52	5.0	56	0	92.9	73.9	118	50.2	3.52	15	
Xylenes, Total	109	5.0	112	0	97.3	80.3	116	106	2.79	15	
Surr: 1,2-Dichloroethane-d4	61.5	0	50	0	123	84.3	135	0	0	0	
Surr: 4-Bromofluorobenzene	50.7	0	50	0	101	81.1	113.3	0	0	0	
Surr: Dibromofluoromethane	54.9	0	50	0	110	88.9	121.2	0	0	0	
Surr: Toluene-d8	52.4	0	50	0	105	84.1	114.5	0	0	0	

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

## CHAIN OF CUSTODY

pg. 1 of 4 Work Order # 04100498

**TEKLAB, INC.** 5445 Horseshoe Lake Road ~ Collinsville, IL 62234 ~ Phone: (618) 344-1004 ~ Fax: (618) 344-1005

Client:	Clayton Group Services		
Address:	3140 Finley Road		
City / State / Zip:	Downers Grove, IL 60515		
Contact:	KEN COMINE	Phone:	(630) 795-3200
E-Mail:	kcomine@claytongrp.com		
Fax:	(630) 795-1130		

Project Name / Number 15.03095.15-003		Sample Collector's Name NORMAN BOLIVAR.		MATRIX										INDICATE ANALYSIS REQUESTED													
Requested Due Date STAT		Billing Instructions PO# 15.03095.15-003		# and Type of Containers																							
Lab Use Only	Sample Identification	Date/Time Sampled	UNPRES	HNO <sub>3</sub>	NaOH	H <sub>2</sub> SO <sub>4</sub>	HCL	MeOH	NaHSO <sub>4</sub>	Other	Water	Drinking Water	Soil	Sludge	Sp. Waste	SKINNER LISTED		GENERAL CHEMISTRY (SEE ATTACHED TABLE A)		< VOCs + EDB		< 1,4-DIOXANE					
151100498-001	HMW-25/041019	10/19/04 1555	V				V									V	V	V	V	V	V	V	V				
-002	HMW-26/041020	10/20/04 1020	V				V									V	V	V	V	V	V	V	V				
-003	HMW-27/041020	10/20/04 1345	V				V									V	V	V	V	V	V	V	V				
-004	HMW-28/041020	10/20/04 1640	V				V									V	V	V	V	V	V	V	V				
-005	HMW-29/041020	10/20/04 1830	V				V									V	V	V	V	V	V	V	V				
-006	DUP-001/041020	10/20/04 -	V				V									V	V	V	V	V	V	V	V				
-007	EQB-001/041020	10/20/04 1545	V				V									V	V	V	V	V	V	V	V				
-008	TB-001/041018	10/18/04 -					V									V	V	V	V	V	V	V	V				

Relinquished By	Date / Time	Received By	Date / Time
Warren Baldwin	10/21/04 0900	Marcia Colleen	10/21/04 0927
Marcia Colleen	10/21/04 1040	Elizabeth A. Weber	10/21/04 1040

## **CHAIN OF CUSTODY**

pg. 1 of 4 Work Order #

**TEKLAB, INC.** 5445 Horseshoe Lake Road ~ Collinsville, IL 62234 ~ Phone: (618) 344-1004 ~ Fax: (618) 344-1005

Client:	CLAYTON GROUP SERVICES
Address:	311B FINLEY ROAD
City / State / Zip:	DAWNING CIRCLE, IL. 60515
Contact:	KEN COMINE
	Phone: (630) 795-3200
E-Mail:	Kcomine@claytongrp.com
Fax:	(630) 795-1130

Relinquished By	Date / Time	Received By	Date / Time
Warren Barron	10/21/04 0900	Wade Anderson	10/21/04 0927
Miller Groden	10/21/04 1040	Elizabeth A. Weber	10/21/04 1040

## CHAIN OF CUSTODY

pg. 1 of 4 Work Order # \_\_\_\_\_

TEKLAB, INC. 5445 Horseshoe Lake Road ~ Collinsville, IL 62234 ~ Phone: (618) 344-1004 ~ Fax: (618) 344-1005

Client: CLAYTON GROUP SERVICES  
 Address: 3140 FINLEY ROAD  
 City / State / Zip: DARWOODS GROVE, IL 60515  
 Contact: KEN CONING Phone: (630) 795-3200  
 E-Mail: ken.coning@claytongrp.com Fax: (630) 795-1130

Are the samples chilled?  NO  YES (Ice or Blue Ice)Cooler Temperature: 4.8 °CPreserved in:  Lab  Field *Note added to HMW 28 & DVP 001: dry ice space - 113*

## Comments:

\* SEE ATTACHED TABLE 4.  
 BILL CLAYTON GROUP SERVICES.

Are these samples known to be involved in litigation?  Yes  NoAre these samples known to be hazardous?  Yes  No

Are there any required reporting limits to be met on the requested analysis?

 Yes  No If yes please provide limits in comment section.

Project Name / Number		Sample Collector's Name						MATRIX					INDICATE ANALYSIS REQUESTED					
15.03095.15-003		Norman Bolivar						Water	Drinking Water	Soil	Sludge	Sp. Waste	SCIENTIFIC LIST (SEE ATTACHED TABLE 4)	GENERAL CHEMISTRY (SEE ATTACHED TABLE 4)				
Requested Due Date STAT		Billing Instructions PO# 15.03095.15-003																
Lab Use Only	Sample Identification	Date/Time Sampled																
	EQB-001/041020	10/20/04 1545	✓	✓	✓	✓							✓	✓				
	HMW-28/041020	10/20/04 1640	✓	✓	✓	✓	✓						✓	✓				
	DVP-001/041020	10/20/04 —	✓	✓	✓	✓	✓						✓	✓				
	HMW-27/041020	10/20/04 1345	✓	✓	✓	✓	✓						✓	✓				
Relinquished By			Date / Time						Received By					Date / Time				
<u>Norman Bolivar</u> <u>Project Director</u>			10/21/04 0900 10/21/04 1040						<u>Elizabeth A. Weber</u>					10/21/04 0927 10/21/04 1040				

The individual signing this agreement on behalf of client acknowledges that he/she has read and understands the terms and conditions of this agreement, on the reverse side, and that he/she has the authority to sign on behalf of client.

WHITE - CLIENT YELLOW - LAB PINK - SAMPLER

TEKLAB, INC

## Sample Receipt Checklist

**Client Name: CLAYTON GROUP**

Date and Time Received: 10/21/04 10:40:00 AM

Work Order Number 04100498

Received by: EAW

Checklist completed by: Monica Barnes 10/21/04

Reviewed by:

Signature

Date

Initials

Date

### **Matrix:**

Carrier name: Marc Giedeman

- |   |   |   |   |
|---|---|---|---|
| Shipping container/cooler in good condition?            | Yes <input checked="" type="checkbox"/>         | No <input type="checkbox"/>             | Not Present <input type="checkbox"/>            |
| Custody seals intact on shipping container/cooler?      | Yes <input type="checkbox"/>                    | No <input type="checkbox"/>             | Not Present <input checked="" type="checkbox"/> |
| Custody seals intact on sample bottles?                 | Yes <input type="checkbox"/>                    | No <input type="checkbox"/>             | Not Present <input checked="" type="checkbox"/> |
| Chain of custody present?                               | Yes <input checked="" type="checkbox"/>         | No <input type="checkbox"/>             |   |
| Chain of custody signed when relinquished and received? | Yes <input checked="" type="checkbox"/>         | No <input type="checkbox"/>             |   |
| Chain of custody agrees with sample labels?             | Yes <input checked="" type="checkbox"/>         | No <input type="checkbox"/>             |   |
| Samples in proper container/bottle?                     | Yes <input checked="" type="checkbox"/>         | No <input type="checkbox"/>             |   |
| Sample containers intact?                               | Yes <input checked="" type="checkbox"/>         | No <input type="checkbox"/>             |   |
| Sufficient sample volume for indicated test?            | Yes <input checked="" type="checkbox"/>         | No <input type="checkbox"/>             |   |
| All samples received within holding time?               | Yes <input type="checkbox"/>                    | No <input checked="" type="checkbox"/>  |   |
| Container/Temp Blank temperature in compliance?         | Yes <input checked="" type="checkbox"/>         | No <input type="checkbox"/>             |   |
| Water - VOA vials have zero headspace?                  | No VOA vials submitted <input type="checkbox"/> | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>                     |
| Water - pH acceptable upon receipt?                     | Yes <input type="checkbox"/>                    | No <input checked="" type="checkbox"/>  |   |

**Adjusted?**                            **Checked by**

Any No and/or NA (not applicable) response must be detailed in the Case Narrative or on the Chain of Custody.

Client contacted:

Date contacted:

**Person contacted:**

Contacted by:

### Regarding:

### Comments:

#### **Corrective Action:**